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REVERENDISSIMO IN CHRISTO PATRI

JOANNI MOORE

THEOPHILUS DIVINUS

ARCHIEPISCOPO CANTUARIENSIS

ANNO DOMINI 1844

IN OMNI SUAVITATE

VERE INTEGRITATE

ET OMNI SUAVITATE

INTEGRITATE

TERTIUM HUNC

NATURAE VIVARIUM

VASCICULUM

CURIOSE OBSERVANTIA

D.D.D.

GEORGIUS SHAW

FABRICIUS T. HODGE

REVERENDISSIMO IN CHRISTO PATRI,

JOANNI MOORE,

PROVIDENTIA DIVINA,

ARCHIEPISCOPO CANTUARIENSI,

ANIMI CANDORE,

INGENII SUAVITATE,

VITÆ INTEGRITATE

SPECTATISSIMO,

TERTIUM HUNC

NATURÆ VIVARIII

FASCICULUM,

CULTU OMNI ET OBSERVANTIA,

D. D. D.

GEORGIUS SHAW,

FREDERICUS P. NODDER.

TO

THE MOST REVEREND FATHER IN GOD,

J O H N,

BY DIVINE PROVIDENCE,

ARCHBISHOP OF CANTERBURY,

&c. &c. &c.

THIS THIRD VOLUME

OF

THE NATURALIST'S MISCELLANY

IS,

WITH THE MOST PROFOUND HUMILITY, INSCRIBED,

BY

HIS GRACE'S MOST DEVOTED SERVANTS,

GEORGE SHAW,

FREDERICK P. NODDER.

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OF AGRICULTURE

THE GREAT FIRST AND LAST IN GOD

JOHN

BY THE REV. J. H. W.

AN EDITION OF THE

OF THE

THIS THIRD VOLUME

OF

THE NATURE AND HISTORY

WITH THE HISTORY OF THE

THE GREAT FIRST AND LAST IN GOD

GEORGE THAW

U.S. DEPARTMENT OF AGRICULTURE
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WASHINGTON, D.C.

CERTHIA COCCINEA.



CHARACTER GENERICUS.

Rostrum arcuatum, tenue, subtrigonum, acutum

Lingua acuta.

Pedes ambulatorii.

Lin. Syst. Nat. p. 184.

Picæ.

CHARACTER SPECIFICUS, &c.

CERTHIA COCCINEA, alias caudaque nigris,
rostro pallido.

CERTHIA COCCINEA.

Gmel. Syst. 1. p. 470.

CERTHIA VESTIARIA.

Lath. Ind. orn. p. 282.

Certhia Coccinea, in insulis Sandvicensibus copiosissima, rostrum gerit prælongum, incurvum et pallidum: tota avis coloris est læte rubri, exceptis alis caudaque nigris: tabula illam exprimit magnitudine naturali: interdum utrinque juxta humeros macula alba conspicitur.



S. N.
52

London, Published Aug. 1. 1791

by T. P. Nodder & Co. N. 15. Broad Street.

THE
SCARLET CREEPER.



GENERIC CHARACTER.

Bill slender, incurvated, sharp pointed.

Tongue differing in shape in the different species.

Legs moderately stout.

Toes placed three before, and one behind; back toe large: claws hooked and long.

Linnæus. Latham. Pennant.

SPECIFIC CHARACTER, &c.

SCARLET CREEPER, with black wings and tail, and pale bill.

HOOK-BILLED RED CREEPER.

Lath. Synopsf. 1. p. 704.

The Scarlet Creeper is a native of the Sandwich Islands, where it is extremely numerous. The bill in this species is very long, hooked, and of a pale colour. The whole bird is of a vivid red, except the wings and tail, which are black. In some individuals a white spot appears on each side the shoulders.

RANA CORNUTA.



CHARACTER GENERICUS.

Corpus tetrapodum, ecaudatum, nudum.

Lin. Syst. Nat. p. 354.

CHARACTER SPECIFICUS, &c.

RANA PALPEBRIS CONICIS.

Lin. Syst. Nat. p. 356.

BUFO CORNUTUS s. Spinofus Virginianus.

Seb. 1. t. 72. f. 1. 2.

BUFO CORNUTUS.

Laur. amphib. p. 25. n. 2.

Qui quæstioni respondere vellet, quidnam animal effinxerit natura deformissimum? vix hæreret ranam cornutam quasi exemplum insolitæ turpitudinis feligere; quæ sane vel ipsa Pipa seu Surinamensi foedior est et monstrosior. Non possumus illam non horrescere et averfari frontem intuentes quasi cornua gerentem, summas nempe palpebras in mucronem callosum productas, orisque immodicam amplitudinem, hiatumque ultra solitum immanem. Rarissima est rana cornuta. Americam
Septen-

Septentrionalem inhabitat, et in Virginia potissimum invenitur. Color generalis est fusco-virescens, fasciis latis albicantibus longitudinalibus per dorsum ductis. Cutis quoque corporis superioris tuberculis aculeatis contexta est. Crura fusco transversim fasciata sunt.



London Published Aug. 1. 1799, by F. P. Nodder & Co. Brewer Street.

THE HORNED FROG.



GENERIC CHARACTER.

Body four-footed, naked, without tail.

Lin. Syst. Nat.

SPECIFIC CHARACTER.

FROG with horned eyelids.

Should inquiry be made, which is the ugliest animal yet known to exist? the creature here represented might perhaps with justice be proposed as an answer: an animal of such prodigious deformity as even to exceed in this respect the Surinam toad, or *Rana Pipa*. What gives an aspect so peculiarly forbidding to the present species is the horned appearance of the front, which is caused by a sharp-pointed elongation of the upper part of each eyelid into a callous process resembling a horn: to this may be added the excessive width of the mouth, which exceeds that of every other known species of *Rana*. This animal is extremely rare, and is a native of some parts of North America. It is principally found in Virginia. Its general colour

is

is a greenish brown, with broad longitudinal stripes of whitish on the back, and the skin on the upper part of the body is covered with a kind of spiny tubercles: the legs are transversly fasciated with brown.

PAPILIO HELENA.



CHARACTER GENERICUS.

Antennæ apicem versus craffiores, sæpius clavato-capitatae.

Alæ (sedentis) erectæ sursumque conniventes.
(*Volatu* diurno.)

Lin. Syst. Nat. p. 744.
Eq. Tr.

CHARACTER SPECIFICUS, &c.

PAPILIO alias dentatis atris concoloribus : posticis disco communi aurato.

Lin. Syst. Nat. p. 748.

Clerk. ic. t. 22. f. 1.

Fabr. Spec. Inf. 2. p. 10.

Papilionem Helenam, vix ab ullis exoticis pulchritudine superatum, distinguit aterrimus et quasi holosericus alarum color; quarum fibræ virgis nonnullis pallidioribus et cinereis notantur. Alis utrisque inferioribus summum decus affert macula amplissima insigniter aureo-flava, venisque nigris pulcherrime striata. Americam australem incolit Papilio Helena, et præcipue in Surinamia invenitur.





HELENA.

OR, THE

BLACK-AND-GOLD BUTTERFLY.



GENERIC CHARACTER.

The *Antennæ*, or *Horns*, thickening towards the upper part, and generally terminating in a knob, or club-shaped tip.

The *Wings* (when fitting) erect, and meeting upwards. (*Wing Journal*.)

SPECIFIC CHARACTER.

BLACK BUTTERFLY with both surfaces alike; the disk of the lower wings of a brilliant gold colour.

The *Papilio Helena*, one of the most beautiful of the exotic butterflies, is distinguished by the deep velvet black of its wings, which are marked by a few lighter or greyish stripes accompanying the fibres; while the lower wings are each ornamented by a very large spot or patch of the richest golden-yellow, traversed by several veins of black. It is a South-American insect, and is principally found at Surinam.

MEROPS SUPERBUS.



CHARACTER GENERICUS.

Rostrum curvatum, compressum, carinatum.

Lingua apice laciniata.

Pedes gressorii.

Lin. Syst. Nat. p, 182.

CHARACTER SPECIFICUS.

MEROPS RUBER, fronte, gula, uropygioque
cæruleis, rectricibus duabus intermediis lon-
gioribus.

Quamquam Meropi Brasiliensi Lathamii affinis admodum sit hæc avis, adeo tamen coloribus discrepat, ut pro distincta specie jure habeatur. Illam igitur diverso nomine signavi. In Museo Britannico asservatur pulchrum specimen unde delineata est hæc nostra figura.



THE
SUPERB BEE-EATER.



GENERIC CHARACTER.

Bill curved, compressed, carinated, and sharp pointed.

Tongue (generally) laciniated at the tip.

Feet gressorial, *i. e.* three toes forward and one backward; and the three lower joints of the middle toe closely joined to those of the outmost.

SPECIFIC CHARACTER.

RED BEE-EATER, with front, throat, and rump, blue; and the two middle tail-feathers longer than the rest.

The colours of this bird differ so much from those of the *Merops Brasiliensis* of Mr. Latham, to which it is yet extremely nearly allied, as to justify its being regarded as a distinct species. I have therefore called it by a different title. The beautiful specimen from which the present figure was taken is preserved in the British Museum.

MADREPORA FUNGITES.



CHARACTER GENERICUS.

Animal *Medusa*.

Corallium cavitatibus lamelloso-stellatis.

Lin. Syst. Nat. p. 1272.

CHARACTER SPECIFICUS, &c.

MADREPORA simplex acaulis convexa, subtus
plerumque concava, interdum convexa et
pedunculata.

FUNGUS LAPIDOSUS.

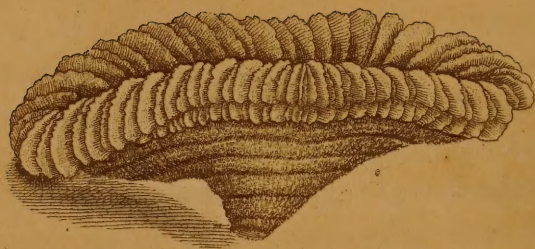
Clus. exot. 125. f. 1.

FUNGUS LAPIDEUS.

Buch. hist. 3. p. 801. f. 1, 2.

Cum antea actis temporibus, dormiret recentiorum philosophorum curiosa sedulitas, quæ jam fere per totum orbem feliciter diffunditur; nugis et fabellis anilibus sæpius credebatur, vetuitque plurimorum hominum hebes incuria ut vel ampla effet speciminum supellex, vel etiam nactorum plena et genuina descriptio. In plantis igitur et animalibus indies erratum est. Radix filicis in septentrionali Asia satis vulgaris naturam cum quadrupede participare diù censebatur, vocabaturque communiter

niter *agnus vegetabilis*. Gryllorum certæ species exoticæ quibus alæ sunt amplæ, virides, et venosæ, folia animata habebantur: nec defuere qui serio et pertinaciter asseruerunt arborum quarundam Indicarum et Americanarum, simul ac deciderant folia, subito alis pedibusque gaudentia circa ipsam arborem volitare. Corallium quoque, seu Madreporam in tabula depictam, fungum esse, sive agaricon in lapidem conversum opinabantur tunc temporis physici. Ignoscendum est sane huic errori potius quam aliis multis, cum Madrepora agarico simillima plerosque spectatores (exceptis paucis, quibus res penitus scrutari cordi est) posset decipere. Comperti sunt tandem in India Orientali, ubi frequentior est Madrepora, seduli examinatores, esse eam fulcrum seu habitaculum substantiæ gelatinosæ et animatæ, forma ad *Medusas* ut vocantur, orbiculatas et depressas accedentis. Efficit animal mirandum hoc domicilium, materiem calcariam glutinosam ab omni corporis parte copiose exprimendo; ita ut fulci seu depressiones in Madrepora, lamellis totidem acutis et radiatis in ipsius animalis corpore respondeant; quod cum sit tenerrimum, aeri expositum in meram pelliculam paucis horis decrescit, nec nisi in aqua marina, qua nascitur, probe potest examinari. In nonnullis speciminibus ex parte inferiore, seu concava, proles minor varia protruditur. In India præcipue Orientali invenitur Madrepora Fungites, crescitque interdum ad magnitudinem sex unciarum in diametro, interdum vix unam superat. Color albus non caret elegantia, totaque superficies exterior tuberculis minutissimis leviter exasperatur. Lamellarum margines interrupto ordine ferratæ sunt.



London, Published Sept. 1847, by F. P. Widdow & Co. No. 15 Broad Street.

THE MUSHROOM MADREPORE.



GENERIC CHARACTER.

The *Animal* resembling a Medusa.

The *Coral* marked by lamellated star-shaped cavities.

SPECIFIC CHARACTER.

MADREPORE with rising or convex laminæ above, generally concave and papillose beneath, and sometimes footstalked.

Before that spirit of inquiry which characterizes the modern cultivators of natural history began to diffuse itself in Europe, innumerable errors were committed in the histories both of animals and vegetables, while the general neglect with which the major part of mankind regarded subjects of this nature, still increased the difficulty of obtaining proper specimens and descriptions of several of the most curious and interesting productions of nature. The root of a species of fern, not uncommon in the northern parts of Asia, was supposed to partake of the nature of a quadruped, and was dignified by the title of the vegetable lamb. Some of the locust tribe with large green veiny wings were believed
to

SCARABÆUS GOLIATUS.



CHARACTER GENERICUS.

Antennæ clavatæ capitulo fissili.

Tibiæ anticæ sæpius dentatæ.

Lin. Syst. Nat. p. 541.

CHARACTER SPECIFICUS, &c.

SCARABÆUS scutellatus, thorace inermi, clypeo bifurco.

Fabr. Spec. Ins. tom. 1. p. 14.

Drur. Ins. 1. tab. 31. ♂ 3. tab. 40.

Voet. Scar. tab. 22. fig. 51.

Scarabæus Goliatus, sui generis fere rarissimus, Africam incolit, præcipue Guineam. Coloribus variat; thorace interdum roseo nigris lineis variato, elytrisque purpureo-ferrugineis; interdum tum thorace tum elytris albido-flavescentibus, nigro interstinctis. In elegantissimo opere Domini Drury primo depicta est hæc scarabæi species.



THE FORK-HEADED BEETLE.



GENERIC CHARACTER.

Antennæ divided at the tip, or head, into several lamellæ.

Tibiæ, or second joints of the fore-legs, generally toothed.

SPECIFIC CHARACTER.

BEETLE with plain thorax striped with black, and forked head.

The *Scarabæus Goliatus*, one of the rarest of its genus, is a native of Africa, and is principally found in Guinea. It is a species which varies much in colour; some specimens having the thorax rose colour, striped with black, and deep-ferruginous or purple-brown elytra, or wing-cases, while in other specimens both thorax and elytra are of a dull yellowish white, or cream-colour, striped and varied with black. This curious insect was first figured in the elegant work of Mr. Drury.

TROCHILUS MULTICOLOR.



CHARACTER GENERICUS.

Rostrum subulato-filiforme, apice tubulato, capite longius: Mandibula superior vaginans inferiorem.

Lingua filiformis, filis duobus coalitis tubulosa.

Pedes ambulatorii.

Lin. Syst. Nat. p. 189.

CHARACTER SPECIFICUS, &c.

TROCHILUS curvirostris fuscus, vertice, gula, pectore, humerisque, viridi-aureis, abdomine rubro, genis cyaneis.

TROCHILUS MULTICOLOR.

Lath. ind. orn. p. 308.

Gmel. Syst. Nat. p. 490.

Trochilus Multicolor, variis ditissimus coloribus, inter rarissimas sui generis species habetur. Depingitur figura nostra a specimine pulcherrimo quod suppeditavit Museum Britannicum. Americam Australem incolit hæc avicula.



London, Published Oct. 1799, by R. P. Nodder & Co. N. 15 Broad Street

THE
HARLEQUIN HUMMING-BIRD.



GENERIC CHARACTER.

Bill slender, tubular, the upper mandible sheathing the lower.

Tongue very long, missile; formed of two conjoined cylindric tubes.

Toes three forward, one backward.

SPECIFIC CHARACTER, &c.

Curve billed brown Humming-Bird, with gold-green crown, throat, breast, and shoulders, red belly, and blue cheeks.

HARLEQUIN HUMMING-BIRD.

Lath. Synops. 2. p. 760.

The *Trochilus Multicolor*, or Harlequin Humming-Bird, so remarkable for the diversity of its colours, is one of the rarest of its genus. The figure here represented is taken from the beautiful specimen in the British Museum. This bird is a native of South America.

ISIS NOBILIS.



CHARACTER GENERICUS.

Stirps lapidea, rigida.

Flores Hydræ e poris lateralibus.

CHARACTER SPECIFICUS, &c.

ISIS stirpe corallina æquali continua, striis obsoletis obliquis, ramis vagis.

Lin. Syst. Nat. p. 1288.

CORALLIUM RUBRUM.

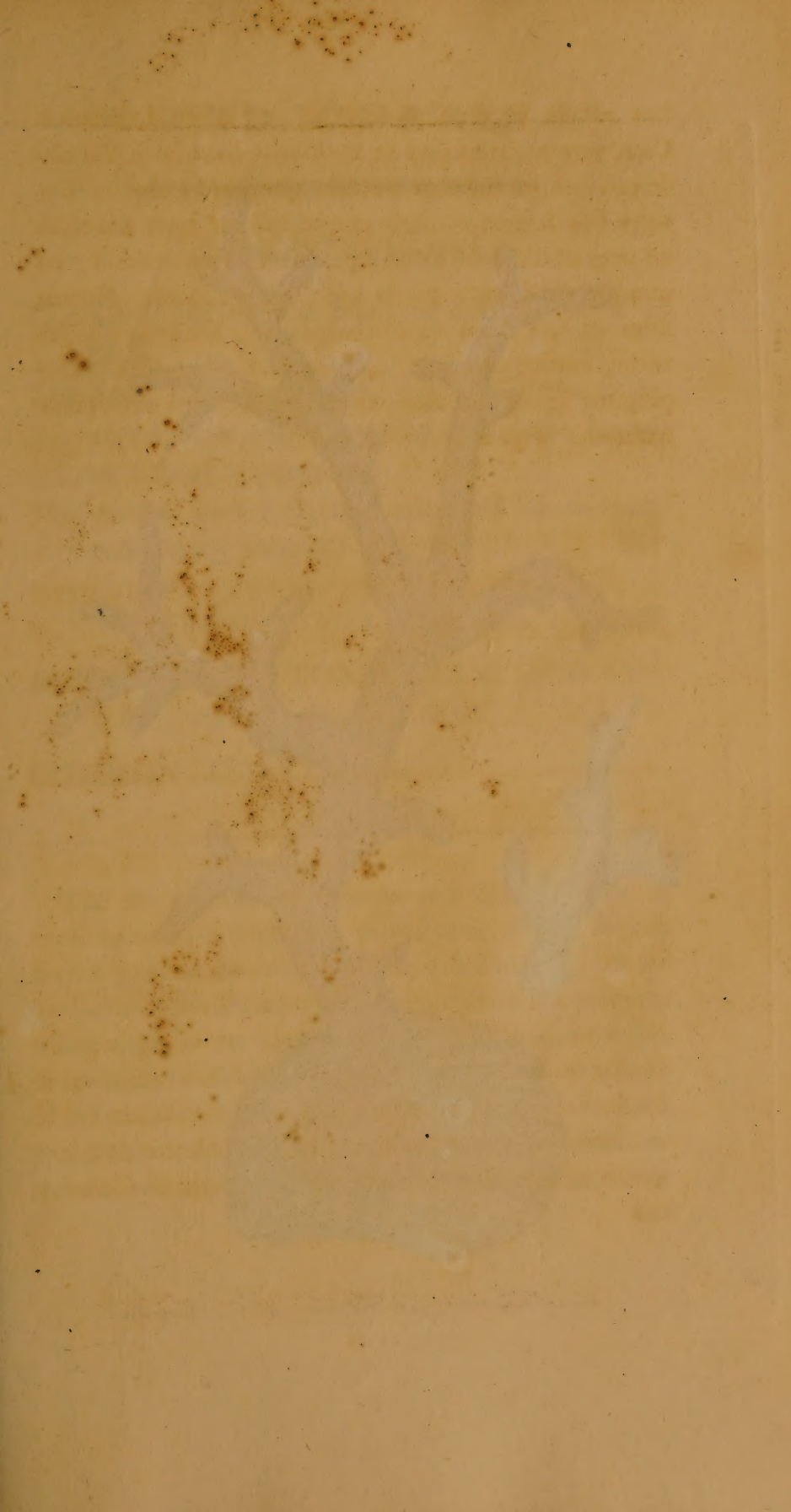
Bauh. pin. 366.

GORGONIA PRETIOSA.

Ellis. Zooph. p. 90.

Isis nobilis, seu Corallium vulgare rubrum, e substantiis illis marinis est quæ, communi fere physicorum recentium consensu, ab animalibus hydras seu polypos quodammodo referentibus effingi creduntur. Degunt hæc animalia in cavitatibus istis quæ in cortice corallii molli et subereo frequenter conspiciuntur; eorumque vestigia paulatim distantia punctisque similia in superficie etiam durissima imprimuntur, omnibus corallii ipsius ramusculis striis longitudinalibus ab ipsa basi extrinsecus notatis. Fatendum sane est non mediocri fide opus esse ut omnia Lithophyta ab animalibus incolentibus

bus revera et omnino formari persuasum habeamus. Cum vero nostrum non sit notissimas Domini Ellisii observationes in dubium vocare, gaudeant volumus lectores suis sententiis, statuantque ipsi an inter animalia an vegetabilia substantias hasce satius sit numerare : ad utraque enim miro modo videntur pertinere. Notandum est specimina corallii rubri, quo formosiora videntur, cortice exteriori, ut plurimum, denudari. Depingitur igitur ramulus cortice obductus juxta ipsam naturam. *Fig. 2.*





London, Published Oct^r 1790 by F. P. Acland & Co. V. 1. is Brewer Street.

RED CORAL,



GENERIC CHARACTER.

The *Coral* having the habit or appearance of a plant.

The *Stem*, or internal part, differing in the different species, and generally either of a horny or a stony appearance.

The *cortical part* soft, and inhabited by animals resembling polypes.

SPECIFIC CHARACTER, &c.

BRIGHT-RED STONY-BRANCHED CORAL, with longitudinal striæ.

COMMON RED CORAL.

The *Isis nobilis*, or common red Coral, is one of those numerous submarine productions which, by the almost general consent of modern naturalists, are regarded as the fabrication of animals resembling polypes, which reside in the cavities so constantly seen in the soft or cortical part of the coral; and the impressions or vestiges of which are visible even on the surface of the hard part or the coral itself; being generally seated at distant intervals, and appearing like small impressed spots, while
the

the whole coral, throughout all its ramifications, is marked externally by longitudinal striæ proceeding from the very base itself. It must be candidly confessed that a good share of philosophical faith is necessary to reconcile us to the idea of all the coral tribe being entirely the work of animals: yet as we cannot presume to controvert the well-known observations of Mr. Ellis, we shall leave our readers to their own opinions, and at perfect liberty to regard these curious substances either as belonging to the animal or vegetable kingdom, to both of which they seem to be strangely allied. It is necessary to observe that the specimens of red coral as generally seen, have, in order to increase the beauty of their appearance, been deprived of their cortical or exterior coat. A branch in its natural state, or with its exterior coat, is represented at *fig. 2.* in the annexed plate.

LACERTA VARIA.



CHARACTER GENERICUS.

Corpus tetrapodum, caudatum, nudum.

CHARACTER SPECIFICUS,

LACERTA cauda longa carinata, corpore maculis transversis variis.

Tam prope accedit hæc lacerta ad illius similitudinem quam Linnæus nomine *Monitoris* descripsit, ut dubium forsan sit an species vere sit distincta, seu illius tantum varietas. Corpus uncias circiter quindecim longum est, caudaque multo longior. Color niger est, notis, striisque flavis, imparibus, per corpus transverse discurrentibus. Super crura sunt series transversæ macularum rotundarum, caudaque fasciis latis nigris flavisque alternatim interstinguitur. In nonnullis speciminibus color flavus pallidior multo est quam in aliis, et fere albescens. Plurima hujus lacertæ specimina novissimis a Nova Hollandia navigiis in Angliam illata sunt.



THE VARIEGATED LIZARD.



GENERIC CHARACTER.

Body four-footed, tailed, naked.

SPECIFIC CHARACTER.

LIZARD with long carinated tail, the body transversely variegated.

This Lizard approaches so extremely near to the *Lacerta Monitor* of Linnæus, or *Monitory Lizard*, as to make it doubtful whether it be not in reality a variety of that species. The body is about fifteen inches in length, and the tail is considerably longer. The animal is of a black colour, variegated with yellow marks and streaks of different shapes, and running in a transverse direction. On the legs are rows of transverse round spots; and on the tail broad alternate bars of black and yellow. In some specimens the yellow is much paler than in others, and nearly white. Several specimens of this species were brought from New Holland during the late voyage from Botany Bay.

margò nempe crenis parvulis ruberrimis et exstantibus ornatus. Crista quoque mollissima et quasi serica. Peninsulam Malaccam, variasque Indiæ Orientalis insulas inhabitat Tetrao Porphyrio. Observandum est in aliquibus speciminibus, (maribus fortasse,) exstare in basi frontis setas aliquot nigras, quæ in hoc specimine defuere. Notandum quoque est hanc avem, quamvis in genere adeo diverso, in multis similem esse Cuculo Persæ Linnæi.



London, Published Nov^r 1st 1799, by F. & J. Vowler & Co. No. 5. Brecon Street.

THE VIOLACEOUS PARTRIDGE.



GENERIC CHARACTER.

Eyes (generally) bounded, either above or on one side, by a granulated red skin.

Bill convex, short, and strong.

SPECIFIC CHARACTER, &c.

VIOLACEOUS - BLACKISH PARTRIDGE
with a cast of green, ferruginous-brown wings, and compressed, upright, ferruginous-red crest.

LESSER-CROWNED PIGEON.

Lath. Syn. vol. 2. p. 622.

The numerous genus *Tetrao*, comprehending all the species of Grouse, Partridge, Heathcock, &c. belongs to the order called *Gallinæ*, or such as in their general characters and appearance make some approach to the common Cock, or Phasianus Gallus of Linnæus. By far the major part of the Tetraones are exotic birds; and indeed most of them are extra-European birds. The present species, exclusive of its unusual colour and peculiar elegance, is likewise remarkable for being one of the rarest of the genus: it is also to be observed,

that from a kind of ambiguity in its appearance, it may seem to bear almost as much affinity to the genus *Columba* as to that of *Tetrao*; and indeed in a dried specimen it is not easy to decide with absolute precision to which genus it should with the greatest propriety be referred. The present figure was taken from the living bird, and exhibits with great fidelity its several characters. The eyelids are singularly formed; being regularly furrounded by a series of rising crenatures of the most vivid scarlet. The crest also, which is of a structure peculiarly delicate, adds greatly to the beauty of the bird. It is a native of Malacca, and some of the East-Indian islands. It should be observed that in some specimens, (perhaps males,) a certain number of long, black, rising bristles appear, seated at the base of the front: these in the present specimen were wanting. It may be added, that notwithstanding the difference of its genus, this bird bears a striking affinity with the *Cuculus Perfa* of Linnaeus.

PHALANGIUM CANCROIDES.



CHARACTER GENERICUS.

Pedes octo.

Oculi verticis duo contigui, duo laterales.

Frons antennis pediformibus.

Abdomen rotundatum.

Lin. Syst. Nat. p. 1028.

CHARACTER SPECIFICUS, &c.

PHALANGIUM abdomine obovato depresso, chelis lævibus : digitis pilosis.

Lin. Syst. Nat. p. 1028.

CHELIFER abdomine lineis transversis.

Geoffr. Paris. 2. p. 618.

SCORPIO MINIMUS.

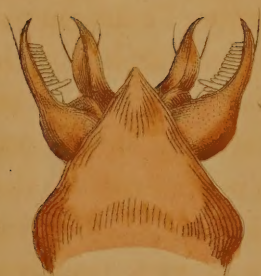
Roefel. 3. *Supl.* t. 64.

Animalculum hoc, physicis diu cognitum, diversis temporibus ad diversa genera retulerunt entomologi. Laboriosus celeberrimusque Swammerdamus quasi scorpionis speciem descripsit. Idem fecit Roefelius. Quamquam in editione duodecima Systematis Naturæ Linnaeus in genere Phalangii posuerit, in Fauna tamen Suecica ab eodem auctore conscripta, inter acaros numeratur. Ingeniosus Degeer genus illi distinctum nomine Cheliferi

Cheliferi instituit. Fabricius denique in *Systemate Entomologico* iterum ad genus *Scorpii* amandavit, cui fortasse conjunctius est quam ulli alii. Magnitudine multum variat hoc insectum: quæ enim in Anglia inveniuntur specimina, multo minora sunt quam in Sebæ, Swammerdami, et Roefelii operibus depicta. Figura microscopica in hac nostra tabula accuratissime delineatur. Altera quæ disjungitur, caput et thoracem amplitudine admodum aucta ostendunt, ut partes pectinatæ appareant; quæ quamvis situ diversæ, formam tamen fere eandem habent ac in scorpiis. Figura 1. magnitudinem naturalem insecti, ut in Anglia conspicitur, monstrat. Accusat hoc insectum Linnæus, sed (ut mihi videtur,) injuria, cutim interdum penetrandi, papulamque magnitudine pisi, summo cum dolore excitandi. Circa parietes antiquos, ut plurimum invenitur, et interdum inter papyram, &c. conspicitur. Inter insecta quoque rariora non immerito numeratur.



I - 



London. Published Nov. 1794. by J. P. Noadon & Co. No. 10. Brewer Street.

THE CANCROID PHALANGIUM.



GENERIC CHARACTER.

Eight *Legs*.

Two vertical and two lateral *Eyes*.

Antennæ resembling legs.

Abdomen rounded.

SPECIFIC CHARACTER.

PHALANGIUM with obovate depressed abdomen, and smooth chelæ, slightly hairy at the tips.

This little insect, which has long been known to naturalists, has been occasionally referred to very different genera. The celebrated and laborious Swammerdam has described it as a species of Scorpion. In the works of Roefel it is also regarded as a Scorpion. In the twelfth edition of the *Systema Naturæ* of Linnæus it is ranked under the genus *Phalangium*; while in the *Fauna Suecica* of the same author it is made an *Acarus*. The ingenious Degeer institutes for it a separate genus under the name of *Chelifer*. Lastly Fabricius in his *Systema Entomologiæ* has remanded it to the genus *Scorpio*, to which perhaps it is more nearly allied than to any other. This insect seems to vary considerably in size; those
which

which are found in our own country being much smaller than the representations given by Swammerdam, Roefel, and Seba. The microscopical figure in the annexed plate is executed with the greatest accuracy. The separate figure represents the head and thorax very much magnified, in order to shew the pectinated parts, which though differing in situation, are nearly of the same form as in scorpions. Fig. 1. shews the natural size of the English specimens. Linnæus accuses it (I believe most unjustly,) of sometimes getting under the skin, and raising a painful tumour. It is generally found on old walls, and sometimes amongst papers, &c., and is not a very common insect.

This little insect, which has long been known to naturalists, has been occasionally referred to very different genera. The celebrated and laborious Swammerdam has described it as a species of Scorpion. In the works of Roefel it is also regarded as a Scorpion. In the twelfth edition of the Systema Naturæ of Linnæus it is ranked under the genus Phalangium; while in the Fauna Svecica of the same author it is made an Acarus. The ingenious Degeer however has it as a separate genus under the name of Chelifer. Finally Fabricius in his Systema Iconographicum has retained it to the genus Scorpiones, which perhaps is a name nearly allied than to any other. This insect seems to vary considerably in size; those which

AMPHISBÆNA ROSEA.

Var. A. Albæ.



CHARACTER GENERICUS.

Annuli trunci caudæque.

Lin. Syst. Nat. p. 392.

CHARACTER SPECIFICUS.

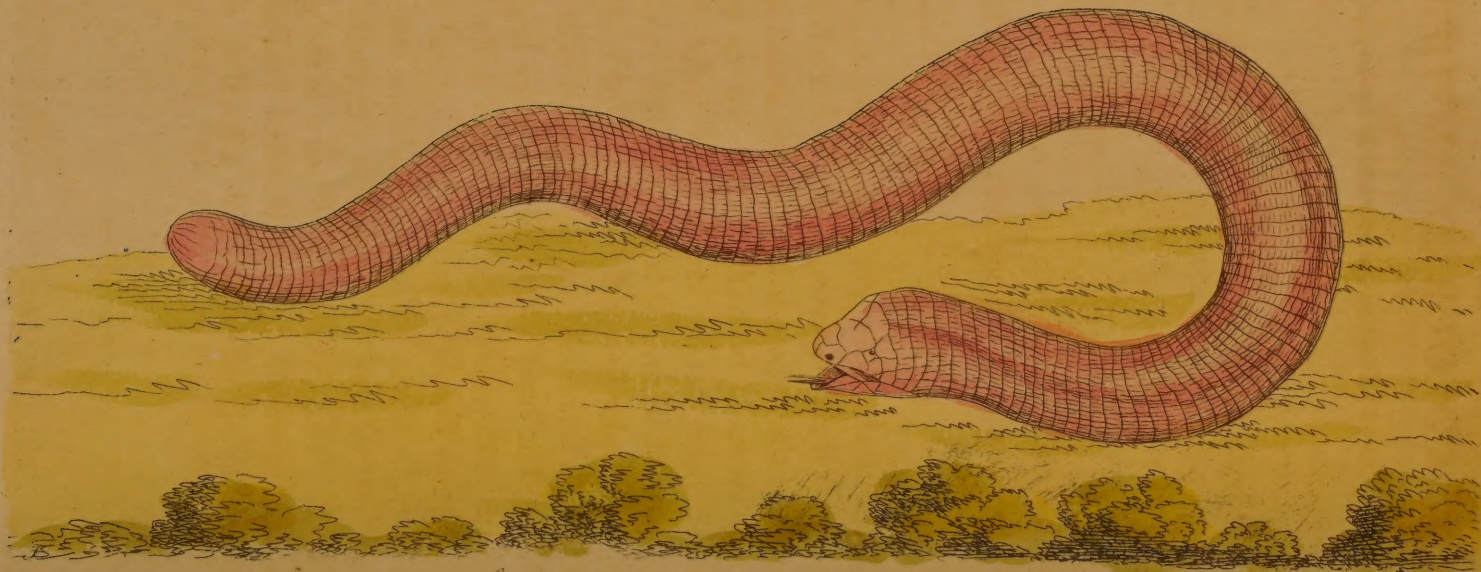
AMPHISBÆNA annulis trunci circiter 223;
caudæ 16.

Generis Amphisbænæ perpaucae quæ noscuntur species a plerisque serpentibus tantum differunt, ut eas primo visu vermes potius quam angues putemus: squamis enim penitus carent, quarum in loco corpus cingunt annuli seu spatia circularia æque distantia, quæ striis innumeris in longitudinem ductis decussantur. Caput in areas paucas dividitur, squamis majoribus in pleroque colubrino genere non abfimiles; caudaque non sensim attenuata, sed vix a proportionē cæteri corporis recedens, apiceque valde obtuso seu rotundato. Orta est ab hac forma vulgaris opinio, Amphisbænæ duo esse capita, unum scilicet in utraque extremitate: cum enim oculi adeo minuti sint ut primo visu non distinguantur, eo fit ut inter caput et oppositum extremum ambiguum sit discrimen. Hujus generis species maxima est Amphisbæna alba; ob colorem pallidulum, gil-

G

vum

vum scilicet, seu fere album, sic nominata. Colore
tamen est interdum pulcherrime roseo, qualis in tabula
depingitur. Non raro pedali est longitudine. Ameri-
cam incolit et plane innocuus est serpens.



London. Published Nov. 1799. by T. P. Nodding & Co. No. 15. Brewer Street.

THE ROSE-COLOURED AMPHISBÆNA.



GENERIC CHARACTER.

The whole animal marked by annuli or circular segments.

SPECIFIC CHARACTER.

AMPHISBÆNA with the annuli of the body amounting to about 223 ; of the tail 16.

The animals of the genus *Amphisbæna*, which contains but very few species, differ so much from the major part of the serpent tribe, as to be almost liable, on a cursory view, to be mistaken for worms rather than snakes ; being totally destitute of scales ; instead of which the whole animal is marked with equidistant annuli, or circular spaces surrounding the body, and decussated by an infinite number of longitudinal divisions or striæ. The head is marked with a few large divisions or spaces analogous to the large scales in the major part of the genus *Coluber* ; and the tail, instead of tapering gradually, is scarce distinguishable from the proportion of the rest of the body ; and is extremely obtuse or rounded. This peculiarity of shape in the genus *Amphisbæna*, gave rise to the erroneous idea of the *Amphisbæna* being furnished with a head at each extremity :

mity : for as the eyes are very small, and at first view inconspicuous, the head bears no striking mark of distinction from the opposite extremity. The largest species of this genus, is the *Amphisbæna alba* ; so called from its colour ; which is a very pale cream-colour, or nearly white : it sometimes however occurs of a beautiful rose-colour, in which state it is represented on the annexed plate. The *Amphisbæna alba* is frequently seen of at least a foot in length. It is a native of America, and is perfectly harmless.

XIPHIAS PLATYPTERUS.



CHARACTER GENERICUS.

Caput maxilla superiore terminatum rostro ensiformi.

Corpus alepidotum.

CHARACTER SPECIFICUS, &c.

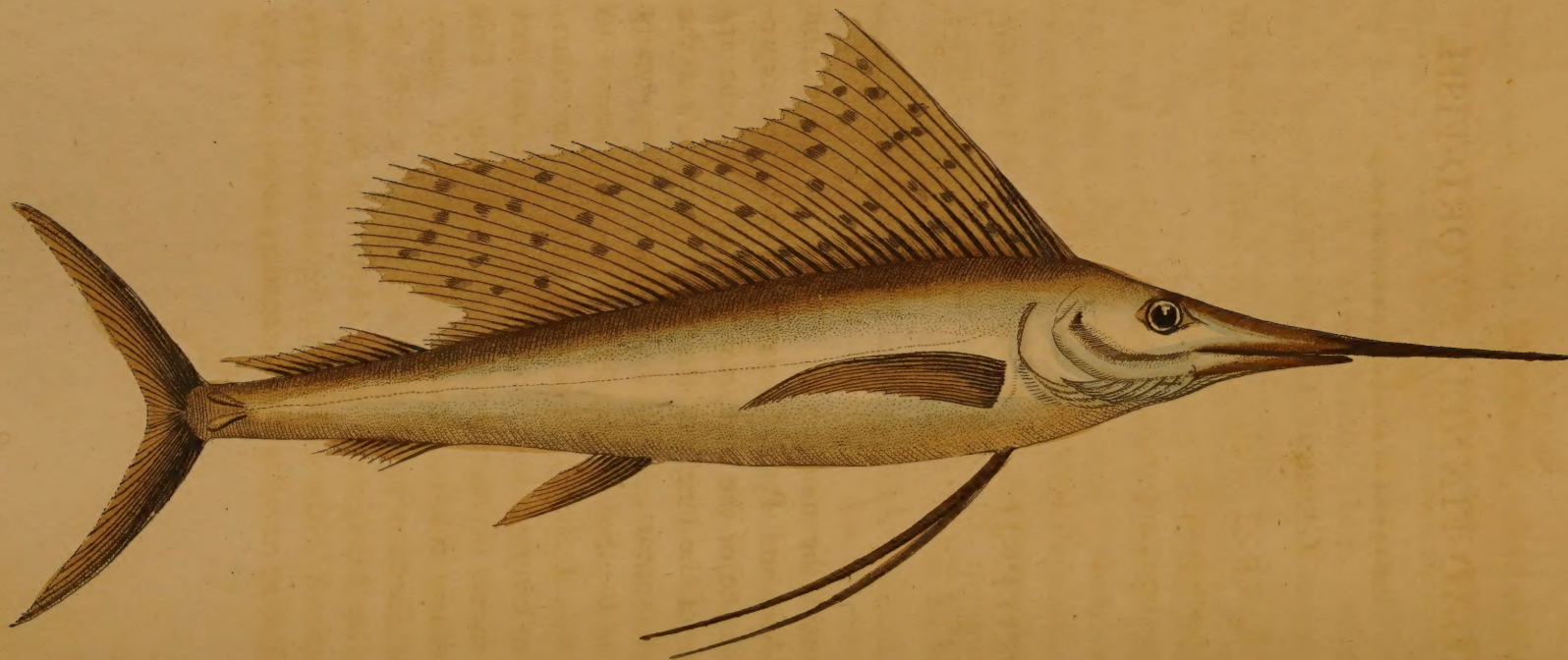
XIPHIAS pinna dorsi latissima, appendicibus pectoralibus acuminatis longissimis.

GUEBUCU.

Marcgr. bras. l. 4. c. 15. p. 171.

Monstrum fortasse nullum hoc insignius generat oceanus vel Indicus vel Pacificus. Si rostrum spectemus peracutum et velut ensiforme, Xiphiæ communi physicis optime cognito affine putemus: cum tamen ab illo variis notis discrepet, speciem omnino diversam habeamus necesse est. Longitudo illi est viginti pedum; interdum multo major. Piscem hunc primus descripsit Marcgravius in historia sua Brasiliensi, qui etiam figuram addidit, certe non elegantem, quæ tamen ipsum animal satis accurate exprimit. Color generalis est sub-cæruleo-argenteus, dorso superiori, capite, caudaque exceptis, quæ insigniter fusca sunt. Pinna dorsi magna fusco-pallescit, maculis rotundatis plurimis ni-

gerrimis notata. Specimen ipsissimum, quo forsan nulum pulchrius et perfectius, unde figura hæc nostra delineata est, in Museo Britannico asservatur, cui dono dedit illustris ille physicus JOSEPHUS BANKS, Baronetus; ad quem tribus circiter abhinc annis, venerunt literæ a Præfecto navis Indicæ, robur fere incredibile piscis describentes, afferentesque illum densam et solidam navis carinam rostro penitus transfixisse. Mortem ipsi Xiphiae conscivit ictus violentia. Fausse admodum evenit non potuisse piscem rostrum reducere; quod si fecisset, perdita esset navis immissa aqua. Rostrum ipsum ligno infixum in Museo Britannico conspici potest. Non solum maria Indica et Australia, sed etiam Septentrionalia incolit Xiphias Platypterus. Fertur eum balænis esse inimicissimum, cumque iis sæpius acerrime pugnare. Notatu dignum est loqui Plinium de navibus Xiphia perfossis; quod tamen inter fabulas veterum physicorum semper habitum est. Cum vero ita se rem revera habere intra paucos annos variis exemplis certissime compertum sit, probabile est Plinium, inscium licet, de hac ipsa specie locutum esse, quæ tunc temporis a Xiphia communi minus accurate distincta est.



London, Published Dec. 7th 1791 by F. & J. Nodder & Co. N^o. 18 Brewer Street.

THE BROAD-FINNED SWORD-FISH.



GENERIC CHARACTER.

Head furnished with a sword-shaped snout or upper jaw.

Body without apparent scales.

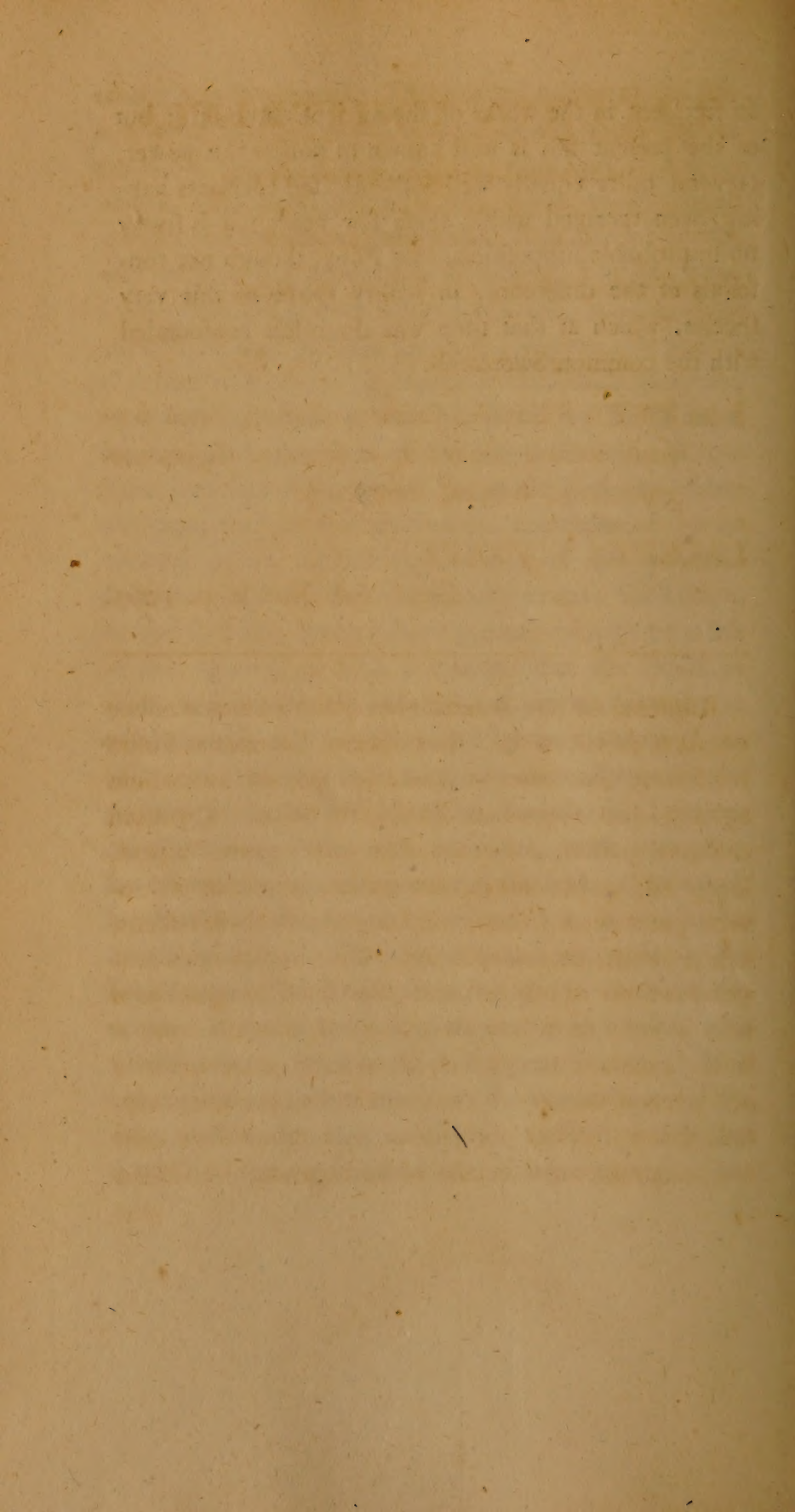
SPECIFIC CHARACTER.

SWORD-FISH with extremely broad back-fin, and very long sharp-pointed thoracic appendages.

Amongst the monsters of the deep which inhabit the Indian and Pacific oceans, the fish here represented is one of the most remarkable. From the appearance of the long and sharp-pointed process of the head, it appears, on a cursory view, very nearly allied to the Sword-fish, already so well known to naturalists. It differs, however, in several particulars, from the common or European Sword-fish, and can by no means be regarded as the same species. This extraordinary fish is found of the length of twenty feet, or sometimes much longer. It was first described by Marcgrave, in his History of Brasil, who has illustrated his description by a figure, which, though not possessing any degree of elegance, is yet sufficient

to ascertain the animal. The general colour of this fish is a silvery blueish white, except on the upper part of the back, the head, and the tail, which are of a deep brown. The back-fin is of a pale brown, finely spotted with roundish marks of deep black. The skin is smooth, and without any appearance of scales. The specimen from which the present figure was taken, is an uncommonly fine one: perhaps the most complete and perfect ever seen in Europe. It is now in the British Museum, to which collection it was presented by Sir JOSEPH BANKS, Bart. President of the Royal Society. About three years ago a letter was sent to the President, from the captain of an East-Indiaman, accompanied by an account of an astonishing instance of the powerful strength which this fish occasionally exerts: the bottom of the said ship having been pierced through by a fish of this species, in such a manner that the sword or snout was completely imbedded or driven through, its whole length, and the fish killed by the violence of the effort. A most singularly fortunate circumstance for the preservation of the vessel! which, had the fish been enabled to have withdrawn its snout, must inevitably have foundered in consequence of the leak. The wood, together with the sword imbedded in it, is now in the British Museum. This fish is found not only in the Brazilian and East-Indian seas, but also in the Northern ocean. It is said to be a great enemy to whales, with which it is reported to have frequent combats! It is remarkable that Pliny mentions the circumstance of the Sword-fish being able to transfix vessels; which has generally been regarded as one of those exaggerations

so frequent in the works of the ancient naturalists; but as the present fish is well known to possess this power, (several other equally-well authenticated accounts having been received within these few years,) it is surely no improbable supposition, that Pliny, though not conscious of the difference, in reality spoke of this very species, which at that time was doubtless confounded with the common Sword-fish.



LACERTA UNISTRIATA.



CHARACTER GENERICUS.

Corpus tetrapodum, caudatum, nudum.

CHARACTER SPECIFICUS, &c.

LACERTA FUSCA, subtus pallidior, linea dorsuali albida, super caput furcata, digitis unguiculatis, subtus, lamellatis.

LACERTA VITTATA ?

Gmel. Syst. Nat. 1. p. 1067.

Rarissima est hæc lacerta, nec certum est annon adhuc unquam descripta sit. Inter species Linnæanas frustra requiritur, nec non in numerofo horum animalium agmine quæ suppeditat Thesaurus Sebæ. Quantum colligere possum a speciminibus quæ egomet inspexi, longa est, ut plurimum, sex uncias, interdum ad novem pertingens. Color est languide fusco-flavescens, ochræ similis, subtus pallidior. Cauda gilva notis longitudinalibus fuscis variatur. Per dorsi longitudinem late discurrit linea insignis albo-gilva, quæ ab utroque latere capitis furcæ instar, divaricat; extremitatibus oculis tenus protensis. Cutis tuberculis, præsertim versus caudam, levitur exasperatur, quæ minutissima cum sint, non nisi attento oculo conspici queant. Simillima est

est illi hæc species quam Linnæus nomine *Gecko* distinctit. In figura nostra exhibetur animal magnitudine ipsius speciminis; sed in figura 1. augetur paululum pars inferior pedis, ut transversæ lamellæ clarius distinctiusque inspiciantur,



THE SINGLE-STRIPED LIZARD.



GENERIC CHARACTER.

Body four-footed, tailed, naked.

SPECIFIC CHARACTER.

BROWN LIZARD, paler beneath, with a white dorsal line forked over the head, and unguiculated feet, lamellated beneath.

This species of *Lacerta* is extremely rare, and it may be doubted whether it has yet been described. It certainly is not a Linnæan species, nor does it occur in the numerous collection of Seba. The size of the specimens which I have examined is rather small, viz. from about six to nine inches in length. The colour is a soft yellowish brown, paler beneath; the tail is cream-coloured, varied with longitudinal marks of brown, and on the back of the animal is a very remarkable white, or rather cream-coloured broad line, which divides on each side the top of the head in the manner of a fork, the extremities of each division just reaching to the eyes. The skin of this Lizard, when closely examined, is slightly exasperated, especially towards the tail, with minute tubercles, but they are so extremely small that they are not perceptible without a close examination. The feet are transversely lamellated beneath.

The

The species to which this animal seems to bear the greatest affinity is the *Lacerta Gecko* of Linnæus. The figure here given represents it of its natural size; and at fig. 1. is represented the under part of one of the feet, rather larger than nature, in order to shew with greater distinctness the transverse lamellæ with which it is furnished.

PSITTACUS CONCINNUS.



CHARACTER GENERICUS.

Rostrum aduncum: mandibula superiore mobili,
cera instructa.

Nares in rostri basi.

Lingua carnosæ, obtusa, integra.

Pedes scanforii.

Lin. Syst. Nat. p. 139.

CHARACTER SPECIFICUS.

PSITTACUS submacrourus viridis, fronte maculaque postoculari coccineis, vertice cærulescente.

Valde affinis P. pacifico, Lath. Syn. 1. p. 252.

Novæ Hollandiæ est incola perpulchra hæc Psittaci species, et inter alias plurimas aves physicis Europæis nuperrime innotuit. Magnitudo est quasi parvi Tur-
turis.



London, Published Dec. 1799 by F. & J. Wadley & Co. No. 10. Brewer Street.

THE
CRIMSON-FRONTED PARRAKEET



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.

Nostrils round, placed in the base of the bill.

Tongue fleshy, broad, blunt at the end.

Legs short. Toes formed for climbing, viz. two backward and two forward.

Linnaeus and Pennant.

SPECIFIC CHARACTER.

GREEN PARRAKEET with lengthened tail, front and spot behind the eye ⁴³⁷crimson, and blueish crown.

N. B. This species is extremely nearly allied to the Pacific Parrot of Latham. vol. 1. p. 252.

The beautiful Parrakeet figured on this plate is a native of New Holland, and is one of the numerous new species of birds very lately made known to the naturalists of Europe. Its size is that of a small turtle.

PLATALEA AJAJA.



CHARACTER GENERICUS.

Rostrum planiusculum : apice dilatato, orbiculato, plano.

Pedes tetradactyli, femipalmati.

Lin. Syst. Nat. p. 231.

CHARACTER SPECIFICUS, &c.

PLATALEA corpore fanguineo.

Lin. Syst. Nat. p. 231.

PLATALEA rosea.

Briss. Av. 5. p. 356. t. 30.

PLATALEA brasiliensis AJAJA dicta.

Marcgr. bras. 204.

Plataleæ leucorodiæ Linnæi, seu communi, corporis forma simillima est eximia hæc avis; coloribus autem longe discrepat: universa enim, exceptis rostro pedibusque, pulcherrime rosea est, alarum parte superiori dorsoque phœniceis. Fertur autem ætate grandior pleneque et perfecte plumata, tota esse penitus læte phœnicea, vel etiam coccinea; collumque inferius torque seu cingulo nigro ornari. Rostrum fusco-pallet. Crura fere nigricant. Vivit eodem modo quo Platalea com-

munis, seu leucorodia, littora nempe locaque aquosa
quærens, animaliaque minora, ranas scilicet, vermes,
et alia ejusmodi depascens. Americam incolit Australem.

THE
ROSE-COLOURED SPOON-BILL.



GENERIC CHARACTER.

Bill flattish, with dilated, orbicular, flat tip.

Feet 4-toed, semi-palmated.

SPECIFIC CHARACTER, &c.

SPOONBILL with crimson plumage.

SPATULE couleur de rose.

Buff. pl. enl. n. 165.

ROSEATE SPOONBILL.

Lath. Syn. 3. p. 16.

This elegant bird, which is a native of South America, in its general shape bears a near resemblance to the *Platalea leucorodia* of Linnæus, or common Spoon-bill, but differs widely in color; the whole bird, except the beak and legs, being generally of a fine full rose-colour, which on the upper part of the wings and the back, deepens almost into crimson. It is said however, that the bird, when advanced in age, and in full perfection of plumage, is entirely of a vivid crimson, or even scarlet, with the addition of a black circle or collar round the lower part of the neck. The bill is of a

pale brown: the legs blackish. In its manner of life it resembles the European or common Spoonbill; frequenting the shores and watery places, and feeding on the smaller aquatic animals, as frogs, worms, &c.

MONOCULUS POLYPHEMUS.



CHARACTER GENERICUS.

Pedes natatorii.

Corpus crusta tectum.

Oculi (plerisque) approximati, testæ innati.

CHARACTER SPECIFICUS, &c.

MONOCULUS testâ antica convexa lunata, cauda triquetro-fubulata.

MONOCULUS testâ convexa futura lunata: postica dentata, cauda fubulata longissima.

Lin. Syst. Nat. p. 1057.

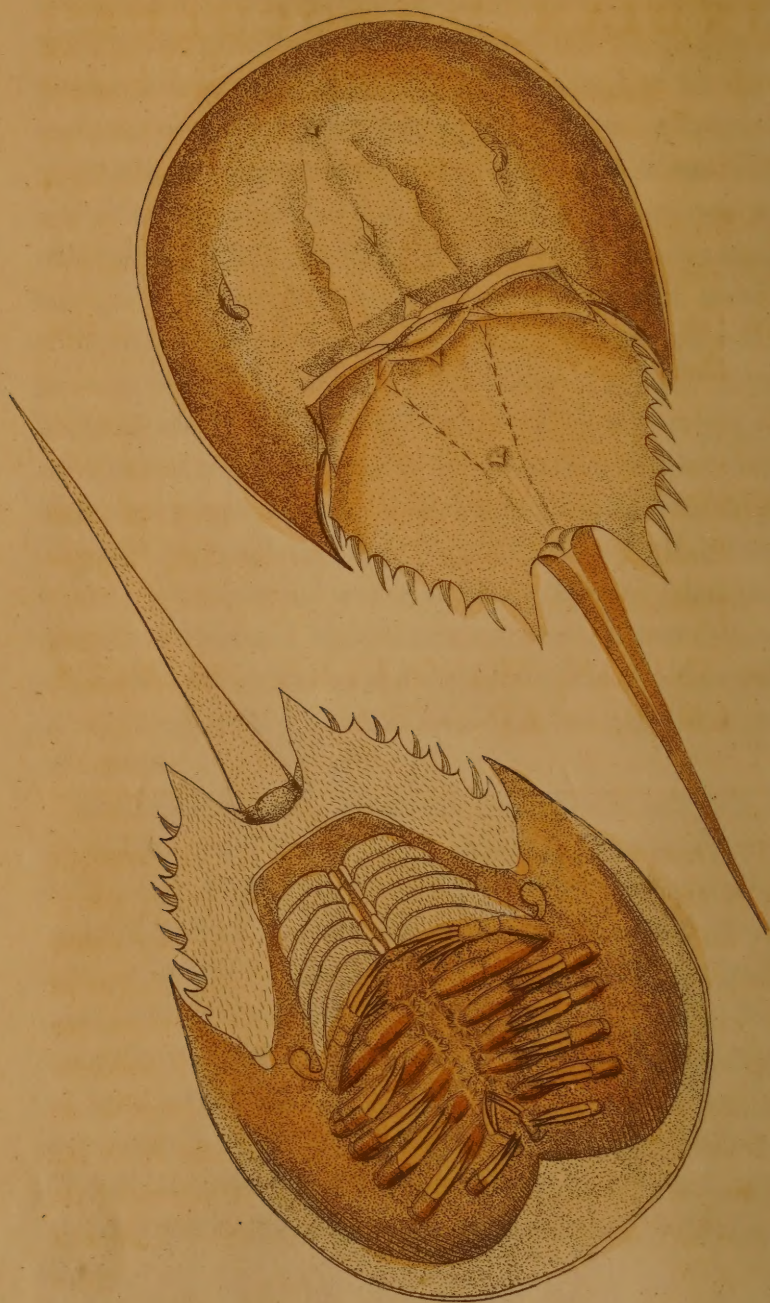
Clus. exot. l. 6. c. 14. p. 128.

Bont. jav. l. 5. c. 31.

Monoculum dicitur hoc genus, quod oculi, ut plurimum, sibi invicem adeo appropinquant, ut primo intuitu unicus esse oculus videantur. Aliquarum tamen specierum oculi, et præsertim ejus de qua jam agitur, sunt alter ab altero valde remoti. Animal quod repræsentat tabula, omnium proculdubio est maximum, quotquot inter insecta numerare hodiernis visum est physicis: est enim illi corpus, extra caudam, interdum bipedale in longitudinem. Linnæus dicit “ insectorum omnium facile

facile maximum." Oceanum Indicum incolit, et, (ut fertur) bina plerumque simul conspiciuntur, scilicet mas et fœmina prope natantes. Pleræque hujus generis species parvula sunt insecta in aquis dulcibus viventia, quorum multa adeo sunt minuta, ut inter animalcula microscopica numerentur. Qui intimas et minus cognitæ Naturæ partes scrutari solent, et innumera animalculorum agmina quibus aquæ scatent, attentius examinare, ii sane summa cum voluptate conspiciant necesse est varias hujus generis species, quæ sine ope microscopii vix videndæ, characteribus tamen genericis plane demonstrant certissimum esse illis cum ingenti et gigantea specie de qua jam loquimur, cognationis vinculum. Hæc animalcula mensibus æstivis in omnibus fere aquis stagnantibus facillime reperiuntur; eorum etiam nonnulla a scriptoribus microscopis, Bakero præcipue, non sane eleganter, satis tamen accurate delineantur, et exempla sunt miræ quoad magnitudinem differentiæ quam in ejusdem generis animalibus non possumus non observare.

Huic descriptioni Monoculi Polyphemi non abs re sit addere, quod tunica oculi externa, quæ in aliis insectis e convexitatibus innumeris basi hexagona inclusis constat, in hoc, attestante Domino André (Phil. Trans. t. 72.) e corpusculis plurimis conicis sit conflata. Possit etiam observari quod oculi multarum parvularum Monoculi specierum, ab oculis aliorum insectorum structura et aspectu differunt, et velut e pluribus ocellis seu globulis tunica communi contentis, componi videntur. Notandum præterea est genus Monoculi generi Cancri (quod astacos omnes et cancos includit) valde esse affine.



S. N.

London, Published Jan'y 1st 1832 by F. D. Nodder & Co. No. 16, Bowyer Street.

THE INDIAN MONOCULUS.



GENERIC CHARACTER.

Feet formed for swimming.

Body covered by a crustaceous shell.

Eyes (in most species) approximated, fixed in the shell.

SPECIFIC CHARACTER, &c.

MONOCULUS with the anterior part of the shell lunated, and long, triangular, sharp-pointed tail.

The INDIAN MONOCULUS, MOLUCCA CRAB, or KING-CRAB.

The name Monoculus was bestowed on this genus of insects from the circumstance of the eyes being generally seated so near each other, as, upon a cursory view, to appear as if single. In some species however, (as in the present,) it happens that they are really very remote from each other. Of all the animals which modern naturalists have agreed to distinguish by the appellation of Insects, the creature figured on this plate is by far the largest yet known; specimens being sometimes seen of two feet in length, exclusive of the tail. Linnæus call:

calls it “ *insectorum omnium facile maximum.*” It is a native of the Indian ocean, and is said to be generally found in pairs, or male and female swimming together. Most of the species of *Monoculus* are small fresh-water insects, and some of them even belong to the tribe of microscopic animalcules. To those who are accustomed to penetrate into the less conspicuous provinces of Nature, and to investigate the legions of animated beings with which the waters in particular are peopled, it must afford a pleasing entertainment to view several species of this genus, which though scarce perceptible without the assistance of the microscope, yet with respect to their generic characters, bear the most striking resemblance to the gigantic species just described. These minute *Monoculi* are very common animalcules, and may be found in the summer months in almost all stagnant waters. Some of them are figured, (though not very elegantly, yet with sufficient exactness,) in Baker’s works on the microscope, and may serve as curious examples of the wonderful disparity of size which sometimes takes place in animals of the same genus.

To what has been said of the *Monoculus Polyphemus*, I should not omit to add, that the eyes in this animal, according to the observations of Mr. André, (*Phil. Transf.* vol. 72.) consist of a great number of very small cones, in which respect they differ from those of most other insects, in which the outward coat of the eye is composed of innumerable slight convexities, each bounded by an hexagonal outline. It may be proper to add, that the eyes of most of the smaller species of
Monoculi

Monoculi differ in their structure and appearance from those of the generality of insects, and seem composed of a number of smaller eyes or globular parts united by the same external tunic. It may also be observed that the genus Monoculus is very nearly allied to that of Cancer, which contains the Crab and Lobster tribe.

PAPILIO ULYSSES.



CHARACTER GENERICUS.

Antennæ apicem versus crassiores, sæpius clavato capitatæ.

Alæ (sedentis) erectæ sursumque conniventes, (volatu diurno.)

CHARACTER SPECIFICUS.

PAPILIO alis caudatis nigris, disco cæruleo radiante; posticis subtus ocellis septem.

Lin. Syst. Nat. p. 748.

Fabr. spec. inf. 2. p. 13.

Eq. Archiv.

Clerk. ic. t. 23.

Cram. pap. 11. t. 121.

Insolitæ pulchritudinis est Ulysses. Alæ sunt nigerimæ et quasi holosericæ; area autem seu pars media plaga magna amænissime cærulea impletur, cum ad oras pertigerit radiata. Exemplo est hoc insectum papilionum caudatorum, in quibus scilicet alæ posticæ in processus seu quasi caudas excurrunt. Asiæ est incola Ulysses. In quibusdam speciminibus color alarum fuscus est potius quam niger. Superficies inferior nigra est, prope apices rufo tinctæ; alarumque posticarum oræ serie macularum ocellatarum cæruleo-rufescentium, albo nigroque fimbriatarum, decorantur.



U L Y S S E S,
OR
THE RADIATED BUTTERFLY.



GENERIC CHARACTER.

Antennæ or Horns thickening towards their extremity, and generally terminating in a knob, or club-shaped tip.

Wings (when fitting) erect, and meeting upwards.
(*Flight* diurnal.)

SPECIFIC CHARACTER.

BUTTERFLY with tailed black wings, the middle-part blue and radiated, with 7 ocellated spots on the under surface of the lower wings.

This is an insect of uncommon beauty. The wings are of the deepest velvet black, while the area or middle part of each is possessed by a very large bed of the most exalted blue that can possibly be conceived, and which terminates in a radiated manner round the edges. This insect also affords an example of the caudated papilios, in which the lower wings are furnished with a pair of appendages resembling tails. It is an Asiatic insect. The ground-colour in some specimens is rather brown than black. The under surface is black, tinged with

with rufous near the tips, and the edges of the lower pair are ornamented by a series of large ocellated spots, of a reddish colour tinged with blue, and edged with black and white.

PSITTACUS EXIMIUS.



CHARACTER GENERICUS.

Rostrum aduncum: mandibula superiore mobili,
cera instructa.

Nares in rostri basi.

Lingua carnosæ, obtusa, integra.

Pedes scanforii.

Lin. Syst. Nat. p. 139.

CHARACTER SPECIFICUS.

PSITTACUS macrourus varius, capite gula pectore crissoque coccineis, dorso nigro flavo-viridi undulato, alis caudaque cæruleis.

Rostrum pallidum. Pedes nigricantes. Rectrices duæ intermediæ virides.

A Nova Hollandia nuperrime illata est hæc avis, et jam primo depingitur. De splendido ejus ornatu speciatim differere supervacaneum foret, cum figura varios colores exquisite ostendit. Magnitudine et forma generali psittaco superbo seu Pennantii simillima est.



S.V.

London, Published Feb. 7th 1798, by

F. R. Nodder & Co. No. Brewer Street.

THE
NONPARÉIL PARROT.



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.
Nostrils roundish, placed in the base of the bill.
Tongue fleshy, broad, blunt at the end.
Legs short. Toes formed for climbing, viz. two forward and two backward.

SPECIFIC CHARACTER.

LONG-TAILED VARIEGATED PARROT,
with head throat breast and vent crimson,
back black undulated with yellow-green,
blue wings and tail.

The two middle tail-feathers are green

This bird is a species hitherto undescribed; having been very lately brought from New Holland. To particularize the richness of its robe would be unnecessary; the figure accurately shewing all its variegations of colour. In size and general form it is strongly allied to the Pennantian Parrot.

COLUBER NASICORNIS.



CHARACTER GENERICUS.

Scuta abdominalia.

Squamæ subcaudales.

Lin. Syst. Nat. p. 275.

CHARACTER SPECIFICUS.

COLUBER subolivaceo-ferrugineus, nigro irroratus, maculis dorsalibus pallidis nigro circumscriptis, fascia laterali undulata pallida.

Abdomen pallide ochraceum fuliginoso-maculatum.

Scuta abdom: 127.

Squam: subcaud: circiter 32.

Inter species hucusque ignotas numerandus est Coluber nasicornis. E numero est dirorum istorum serpentum quorum morsus in calidioribus mundi partibus, mortem inferre solet celerem et luctuosam. Si totum fere genus serpentinum horrescunt plurimi homines in hujusmodi investigationibus minus versati, quanto majori metu putemus illos percuti, qui in vivum hunc colubrum inopinato inciderint; quem totum horrificum deformat vultus præter modum torvus et atrox. Cornua enim gerit duo magna et acuminata, (non, qualia Ceraſtis,) supra oculos; sed super nasum seu summum maxillæ

maxillæ superioris fita. Erecta propemodum sunt, paulum tamen retro flectuntur, extrinsecusque ab utroque latere. Non omnino cornea sunt, sed quodammodo flexibilia, forma fere triangulari sive triquetra. Longa sunt circiter dimidium uncia, et a basi utraque exstat squama dura ejusdem fere formæ cum ipsis cornubus; quo fit, ut duo quasi minora cornua exurgere videantur. Os illi, ut aliis venenatis serpentibus, telis tubulatis duobus utrinque munitur, quæ, cum maxima sint, vulnus sævissimum possunt infligere. Horum minora sunt postica. Longus est Coluber nasicornis uncias circiter triginta quinque. Coloris est fusco-flavescentis, maculis parvulis nigricantibus creberrime irrorati. Per totam dorsī longitudinem, magnis intervallis, decurrit series macularum fusco-flavescentium, majoribus nigris immerfarum; protenditurque per utraque latera a capite ad caudam fascia angusta, ochracea, acute flexuosa, cujus pars inferior seu ventri proxima, nigrior multo est quam reliquum corpus. Venter obscure ochraceus est, seu cinereo-flavus, labeculis variis nigricantibus notatus; sparguntur insuper per totum corpus huc, illuc, maculæ plurimæ diversæ magnitudinis. Cauda tenuis brevisque pro corpore. Squamæ asperæ duræque et insigniter carinatæ. Caput squamis parvis tegitur, parsque superior maculam habet permagnam fuscā, utrinque in processus acuminatos excurrentem. Latera capitis plumbeo, seu cinereo colore cinguntur. Caput ipsum latum et depressum, genæque fusco et flavicante variæ.

Captum fuisse putem hunc serpentem cum jam exuvias depositurus esset; squamæ quippe exteriores a
subja-

subjacentibus facile separantur, quæ, hoc factò, lucidiores videntur; immo circa ventrem fere albescunt, maculis nigrioribus notatæ. Colubrum nasicornem accepit Dominus EDVARDUS JENKINS in oppido vulgo dicto *Charles-Town* in Carolina Australi degens, a navarcha e Guinea profecto, illoque nuperrime Museum Britannicum ditavit. Notum esse eum creditur in interiori Africa.



THE
HORN-NOSED SNAKE.



GENERIC CHARACTER.

Transverse *Lamellæ* under the abdomen.

Broad alternate *Scales* under the tail.

SPECIFIC CHARACTER.

OLIVE-BROWN SNAKE, freckled with blackish, with a row of pale dorsal spots surrounded by black, and a flexuous pale fascia on the sides.

The abdominal plates are 127. The subcaudal scales about 32.

The belly is of a pale olive-colour with dusky spots.

The snake here represented must be considered as a species hitherto unknown, and adds to the number of those malignant reptiles whose bite, in the hotter regions of the globe, proves the dreadful forerunner of a speedy and painful death. If at first glance of most of the serpent-tribe an involuntary sort of horror and alarm is so often felt by those who are unused to the examination of these animals, how much greater dread must the unexpected view of the species here exhibited be supposed to inflict? when to the general form of the creature

ture is superadded the (peculiar fierceness and forbidding torvity with which nature has marked its countenance; distinguished by the very uncommon appearance of two large and sharp-pointed horns, situated, (not as in the *Cerastes*, above the eyes,) but on the top of the nose, or anterior part of the upper jaw. They stand nearly upright, but incline slightly backwards and a little outwards on each side, and are of a substance not absolutely horny, but in some degree flexible. Their shape is somewhat triangular or three-sided. They are about half an inch in length, and at the fore-part of the base of each stands an upright strong scale, of nearly the same shape with the horn itself, and thus giving the appearance of a much smaller pair of horns. The mouth is furnished with extremely large and long fangs or tubular teeth, situated as in other poisonous serpents, and capable of inflicting the most severe wounds: two of these fangs appear on each side of the mouth, of which the hinder pair are smaller than the others. The length of this animal is about thirty-five inches. Its colour is a yellowish olive-brown, very thickly sprinkled all over with minute blackish specks. Along the whole length of the back is placed, at considerable distances, a series of yellowish-brown spots or marks, each of which is imbedded in a patch of black; and on each side the body, from head to tail, runs an acutely flexuous or zig-zag line or narrow band, of an ochre-colour. This band is bounded beneath by a much deeper or blacker shade than on the rest of the body. The belly is of a dull ochre-colour or cinereous yellow, freckled with spots and
markings

markings of blackish. Besides these there is a number of black spots of different sizes here and there dispersed over the whole snake. The tail is somewhat thin and short in proportion to the body. The scales of this snake are harsh and stiff, and are very strongly carinated. The head is covered with small scales, and is on its upper part marked by a very large longitudinal patch of brown, running out into pointed processes at the sides, and bounded by a space of dull lead-colour or cinereous. The shape of the head is broad and flattened: the cheeks are varied with blackish and yellow. It seems to have been taken at a period not far distant from that of casting its skin; as the exterior scales separate easily from the subjacent ones, which then appear of a clearer and lighter colour than before, and the yellowish variegations on the sides and belly approach to a whitish colour, with darkish spots and marks. This snake is supposed to be a native of the interior parts of Africa, and was obtained from the master of a Guinea vessel by the Rev. EDWARD JENKINS of Charles-Town, South Carolina, by whom it was lately presented to the British Museum.

MANTIS STRUMARIA.



CHARACTER GENERICUS.

Caput nutans, maxillosum, palpis instructum.

Antennæ (plerisque) fetaceæ.

Alæ quatuor, membranaceæ, (plerisque) convolutæ; inferiores plicatæ.

Pedes antici compressi, subtus ferrato-denticulati, armati ungue solitario et digito fetaceo laterali articulado. *Postici* quatuor, læves, gresforii.

Thorax linearis, elongatus, angustatus.

Lin. Syst. Nat. p. 689.

CHARACTER SPECIFICUS, &c.

MANTIS thorace utrinque membranaceo-dilatato obcordato.

Lin. Syst. Nat. p. 691.

Roes. inf. 2. gryll. t. 3.

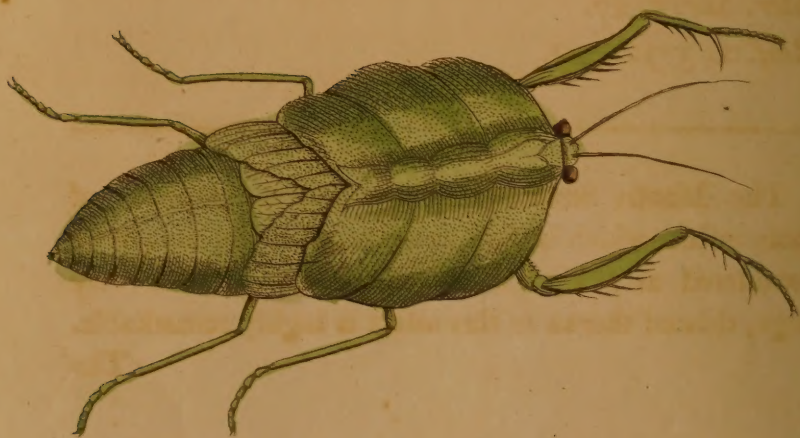
Mer. Sur. 27. t. 27.

Cum antea actis temporibus, fabulis et erroribus immerfa jaceret veritas, non defuere qui hujusmodi insecta folia esse quasi animata firmiter credididerint. Notabilis admodum est thorax permagnus et dilatatus. Alæ inferiores

feriores pellucidæ sunt, levissimo tantum virore tinctæ.
Americam Australem incolit singulare hoc animal-
culum.

Fig. 1, Pupa, seu insectum adhuc imperfectum.

Fig. 2, Imago, seu insectum declaratum.



THE BROAD-BREASTED MANTIS.



GENERIC CHARACTER.

Head unsteady: Mouth armed with jaws, and furnished with palpi.

Antennæ setaceous, (some few species excepted.)

Wings four, membranaceous, in most species convoluted: the lower ones (generally) plicated.

Feet anterior compressed, ferrated beneath, armed with a lateral solitary claw and jointed process; *posterior* four, smooth, formed for walking.

Thorax (in most species) elongated and narrowed.

SPECIFIC CHARACTER, &c.

MANTIS with the sides of the thorax nearly membranaceous and greatly dilated.

Mer. Sur. t. 27.

Roef. 2. *gryll.* t. 3.

The Mantis *Strumaria* is amongst the number of those insects which in less enlightened times have been considered as a kind of animated leaves. The very large, dilated thorax in this insect is highly remarkable.

The

The lower wings are of a transparent appearance, and have but a flight cast of green. This curious animal is a native of South America.

Fig. 1, The insect in its pupa state.

Fig. 2, The insect in its complete state.

PSITTACUS PULCHELLUS.



CHARACTER GENERICUS.

Rostrum aduncum : mandibula superiore mobili,
cera instructa.

Nares in rostri basi.

Lingua carnosæ, obtusa, integra.

Pedes scanforii.

Lin. Syst. Nat. p. 139.

CHARACTER SPECIFICUS.

PSITTACUS macrourus viridis, subtus luteus,
capistro alisque cæruleis.

Rostrum pedesque nigricant.

Inter minimas sui generis numeranda est hæc species, non longe enim superat magnitudine figuram quæ in tabula continetur. Notabile est hanc avem, parvula licet sit, magno illi psittaco qui Ararauna dicitur, primo intuitu admodum similem esse. Species procul dubio nunquam adhuc descripta est, et novam Hollandiam incolit.



London, Published March 1799 by F. B. Nodder

J. G. Brown Sculp.

THE
TURCOSINE PARRAKEET.



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.

Nostrils roundish, placed in the base of the bill.

Tongue fleshy, broad, blunt at the end.

Legs short. Toes formed for climbing, viz. two backward and two forward.

SPECIFIC CHARACTER.

LONG-TAILED GREEN PARRAKEET, yellow beneath, with blue wings and frontlet.

The beak and legs are black.

This may be numbered amongst the smallest of its tribe, not very much exceeding in size the figure here represented. It is remarkable that this diminutive species bears at first view a considerable resemblance to the *Psittacus Ararauna*, or great blue and yellow Macaw: It is an undoubted non-descript, and is a native of New Holland.

SILURUS CALLICHTHYS.



CHARACTER GENERICUS.

Caput nudum. Os cirris aliquot filiformibus tentaculatum.

Membr. branch. radiis 4—14.

Corpus: Radius pinnarum pectoralium aut dorsalis primus spinosus, retrodentatus.

Lin. Syst. Nat. p. 501.

CHARACTER SPECIFICUS, &c.

SILURUS pinna dorsali postica uniradiata, squamis ordine duplici, cirris quatuor.

Lin. Syst. Nat. p. 506.

Amæn. acad. 1. p. 317. t. 14. f. 1.

Gron. mus. 1. n. 70.

Seb. mus. 3. t. 29. f. 13.

Squamarum quibus pisces muniuntur, pulchritudo et diversitas, observationum microscopicarum studiosis amplissimam diu præbuerunt materiem. Nonnullis sunt squamæ ovatæ, annulis concentricis fibrarum reticulatarum ornata: aliis fere quadratæ, fibris in divisiones inæquales dispositis, marginibus aculeorum pellucidorum serie distinctis. Quarundam specierum squamæ ob
exigui-

exiguitatem primo visu vix discerni possunt; aliarum non modo minimas sed et mucro denso coopertas attentissima oculorum acie investigare necesse est. Sunt e contrario pisces qui squamis teguntur amplissimis; quod insigniter evenit in peculiari illa varietate, (ni potius distinctam speciem putemus) Cyprini, nomine Cyprini *Regis* distincti; cujus squamæ quadrantem diametri ipsius corporis æquant. Non desunt denique exempla piscium ad diversissima genera pertinentium, quorum squamæ amplissimæ et durissimæ a reliquis in tantum discrepant, ut prima facie ad ipsa animalia crustata videantur accedere. Hos vocat Linnæus *cataphractus*, quod scilicet quasi lorica muniantur. Ejusmodi principes sunt *Silurus cataphractus*, *Silurus Callichthys*, *Cottus cataphractus*, *Trigla cataphractus*, *Loricaria cataphractus*. *Silurus Callichthys*, quem ostendit tabula, tum Europam tum Americam inhabitat; plerumque autem in America Australi, et præcipue in Brasilia invenitur. Rivulos incolit, e quibus, si æstate fervidiore fere exsiccati fuerint, mirum dictu! se furripit, et per prata late evagatur, aquas altiores quæritans. E piscinis quoque in quibus servatus fit interdum crepit, margines seu aggeres perforando. Relictis tamen aquis, super terram incedere non solius est *Callichthys*; idem enim facere solent alii nonnulli; *Muræna* præcipue *Anguilla* dicta, quæ per prata noctu prorepat, limaces fortasse aliaque id generis prædatura; et si hyems fuerit severior, sub ipso etiam foeno et in cavernis latitans interdum deprensa est. *Callichthys* longitudo communis est circiter quatuor pollices: color fusco-flavescens, dorso paulum obscuriore. Oculi minuti; et utrinque ad latera oris (ut in aliis ejusdem generis) tentacula duo longa et magna extenduntur.



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THE WANDERING SILURUS.



GENERIC CHARACTER.

Head naked, large, depressed.

Mouth wide, generally furnished with long tentacula or beards.

First ray of the pectoral and dorsal fins commonly strong and serrated backwards.

SPECIFIC CHARACTER, &c.

SILURUS with a double range of scales, four beards, and the last dorsal fin single-rayed.

Gron. mus. 3. t. 29. fig. 13.

Marcgr. bras. 151.

The beautiful and varied structure which distinguishes the scales of fishes, has long afforded an extensive field for microscopical observation. In some the scales are of an oval shape, with concentric rings of reticulated fibres; in others of a squarish form, with the fibres curiously disposed into dissimilar patches or subdivisions, and ornamented at the extremities with a series of transparent aculei or prickles. In some fishes the scales are so extremely small as to be scarce distinguishable on a cursory view, and in some they are not only very small, but

but so coated over by a mucous tegument as to require the most attentive investigation in order to discover them. In others, on the contrary, they are as remarkable for their extreme largeness, as in the peculiar variety (if not distinct species) of *Cyprinus* or Carp, known by the title of the King-Carp, in which the scales are equal to a fourth part of the diameter of the fish. Lastly, there are not wanting some instances of fish belonging to very different genera, which are coated with scales of a size so very large, of a structure so uncommonly strong, and of a disposition so unlike that which appears in the scales of other fish, that they seem at first glance to belong to the crustaceous tribe. Fishes of this peculiar cast are termed by Linnæus *cataphracted* or mailed fish, as if in suits of armour. Of these the most remarkable are the *Silurus cataphractus*, *Silurus Callichthys*, *Cottus cataphractus*, *Trigla cataphractus*, and *Loricaria cataphractus*. The *Silurus Callichthys*, here represented, is a native both of Europe and America, but is more common in South America than in Europe, being principally found in Brasil. It inhabits rivulets, and when these during a dry season grow extremely shallow, it has the extraordinary faculty of creeping out and traversing over the dry ground in order to seek deeper water. It has also been known to make its escape from fishponds in which it has been confined, by piercing through the banks. This terrestrial locomotion of fishes is not however confined to the *Callichthys*, but is known to take place in some others, and particularly in the common eel, which frequently creeps about meadows by night, in quest perhaps of slugs, &c., and has been known during the frosts of a severe winter to take refuge under hay-ricks and

and in caverns. The general length of the *Callichthys*, is about four inches: its color is a yellowish brown, somewhat deeper on the back than on the other parts. The eyes are small, and on each side the mouth are situated (as in several others of this genus) two very large and long cirrhi or beards.

TUBIPORA MUSICA.



CHARACTER GENERICUS.

Animal Nereis ?

Corallium tubis cylindricis, cavis, erectis, parallelis.

Lin. Syst. Nat. p. 1270.

CHARACTER SPECIFICUS, &c.

TUBIPORA tubis fasciculatis combinatis: diffimentis transversis membranaceis distantibus.

Lin. Syst. Nat. p. 1270.

PSEUDO-CORALLIUM RUBRUM.

Aldr. mus. 291.

ALCYONIUM FISTULOSUM RUBRUM.

Bauh. hist. 3. p. 808. fig. 2.

TUBULARIA PURPUREA.

Tourn. inst. t. 342.

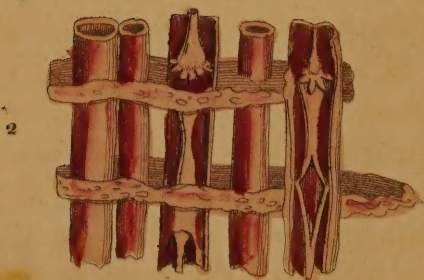
Iis lithophytis annumerandum est hoc corallium quorum si formam generalem spectes, vix possit dubitari quin ab animalibus effecta sint. Constat quippe tota massa e tubulis erectis et parallelis, alio super alium gradatim affurgente, qualiter fere fit in cellulis apum. Septa transversa quibus tuborum strata connectuntur, ascendunt inæqualiter in variis partibus, tubis ipsis raro unciam,

unciam, interdum semiunciam altis, eorundem diametro nunc decimam nunc octavam pollicis partem attingente. Ab hac tamen proportionē in diversis speciminibus longe deceditur. Vera animalium incolentium natura vix adhuc pro certo explorata est: ea tamen putat Linnæus Nereidibus vix ac ne vix differre. Speciem hac pulchriorem vix fortasse inveniemus in toto genere corallino: structuræ enim ipsius elegantiam mire auget color suaviter purpureus seu phoeniceus. Si singuli tubi accuratius inspiciantur, patebit eorum unumquemque tubulum minorem geniculis aliquot seu septis radiatis divisum continere, cujus ope diversis stratis sæpe cum se invicem communicatur. In magnam molem sese extendit formosum hoc corallium, nec defuere specimina quæ pedes duos immo tres diametro superarunt. Cum adhuc sit recens, tota superficies exterior gelata seu mucosa substantia obducitur, quæ etiam per partes tubulatas quodammodo diffundi videtur. Magna Tubiporæ mucificæ est copia circa littora insularum Indicarum nec non maris Pacifici.

Fig. 1, Pars aperta, et microscopio aucta, ut structura interior pateat.

Fig. 2, 3, 4, Tubuli separati magnitudine naturali.





S. N.

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CRIMSON TUBIPORE, OR ORGAN CORAL.



GENERIC CHARACTER.

Animal allied (probably) to the genus Nereis.

Coral consisting of erect cylindric parallel tubes.

SPECIFIC CHARACTER, &c.

TUBIPORE with fasciculated connected tubes,
and distant transverse membranaceous dissepiments.

Argenv. conch. t. 26. fig. A.

Ellis Zooph. p. 144. t. 27.

This is one of those Lithophytes which in structure and general appearance seem plainly to indicate the operation of animals, the whole mass consisting of an assortment of upright parallel tubes, rising over each other by stages, somewhat in the manner of the cells of an honeycomb. The stages or transverse dissepiments by which the strata of tubes are connected, are of unequal heights in different parts of the mass, and the tubes of each stratum seldom rise to the height of an inch, and sometimes do not exceed half an inch, and their diameter is from about a tenth to an eighth of an

an inch. In different specimens however there is a considerable variation, both in the proportional length and diameter of the tubes. The real nature of the inhabiting animals of these tubes is not clearly ascertained, but they are supposed by Linnæus to be strongly allied to Nereides. In point of beauty scarce any of the coral tribe can exceed the present species; the colour, which is a rich purple or deep crimson, highly increasing the elegance of the fabric. The individual tubes, when accurately examined, appear each furnished with a smaller internal tube, which is divided at certain distances by radiated diaphragms or partitions. By means of these internal tubes the different strata often communicate with each other. This curious coral extends itself to a very considerable size; specimens having been frequently seen of from one to three feet in diameter. In its recent state the whole upper surface is coated over by a mucous or gelatinous substance, which seems to pervade the tubular texture of the whole coral. The tubipora musica is produced in the greatest abundance about the shores of the East-Indian islands and those of the Pacific Ocean.

Fig. 1, A piece laid open and magnified by the microscope, in order to shew the interior structure.

Fig. 2, 3, 4, Separate tubes of their natural size.

CASUARIUS AUSTRALIS.



CHARACTER GENERICUS.

Rostrum depresso, rectum, subconicum.

Nares ovatae.

Alae brevissimae, volatui inutiles.

Femora in parte inferiore denudata.

Pedes tridactyli, digitis omnibus anticis.

Cauda nulla.

Lath. ind. orn. p. 664.

CHARACTER SPECIFICUS, &c.

CASUARIUS FUSCUS, vertice inermi.

STRUTHIO CASUARIUS.

Lin. Syst. Nat. p. 265.

CASUARIUS NOVÆ HOLLANDIÆ.

Lath. ind. orn. p. 665.

Inter aves quas protulit ingens illa insula Nova Hollandia (ni continens potius appelletur) insignis est quæ in tabula depingitur Casuarii species; a communi seu Africana adeo discrepans, ut dubitari non possit illam penitus et revera diversam esse. Magnitudine enim est multo majori, alta interdum, ad minus, pedes septem. Color imus cinereo-fuscus, subtus pallidior. Caret caput galea seu crista illa cornea, quæ speciem commu-

nem distinguit. Collum præterea loco rugosæ illius et
rubræ cæruleæque cutis, et caruncularum quæ in Afri-
cana conspicuæ, pennis parvis vestitur, per quas ipsa
cutis in hac parte leviter cærulea vix ac ne vix discerni
possit. In apicibus alarum, quæ ad volandum inutiles,
unguiculus est incurvatus et acutus. Crura validissima,
nigricantia, et in parte postica conspicue ferrata. Ros-
trum ejusdem fere coloris cum cruribus.



THE SOUTHERN CASSOWARY.



GENERIC CHARACTER.

Bill depressed, strait, nearly conical.

Wings extremely small, and unfit for flight.

Feet tridactylous, with all the toes standing forward.

SPECIFIC CHARACTER, &c.

DARK-BROWN CASSOWARY with unarmed head.

NEW-HOLLAND CASSOWARY.

White's Voyage, pl. 1. p. 129.

One of the most remarkable birds which the continent of New Holland has yet afforded is a species of Cassowary which differs from the common or African kind in so many respects as to leave no doubt of its being perfectly distinct. In size it is considerably superior to the common Cassowary, having been seen of the height of at least seven feet. Its general colour is a sort of cinereous brown, somewhat paler beneath. The head is destitute of that horny crest which so strikingly distinguishes the African species; and the neck instead of being furnished with a wrinkled longitudinal red-and-blue skin and wattles as in that bird, is covered

with small feathers, through which the skin, which is of a bluish colour in that part, is just visible. The wings are perfectly useless for flight, and at the tip of each is a small, sharp, crooked spur or claw. The legs are very strong, of a blackish colour, and of a ferrated appearance on the hinder part. The beak is of nearly the same colour with the legs.

ARGONAUTA ARGO.



CHARACTER GENERICUS.

Animal Sepia.

Testa univalvis, spiralis, involuta, membranacea,
unilocularis.

Lin. Syst. Nat. p. 1161.

CHARACTER SPECIFICUS, &c.

ARGONAUTA carina utrinque subdentata.

Gmel. Syst. Nat. p. 3367.

NAUTILUS fulcatus.

Klein. ostr. t. 1. f. 3.

NAUTILUS tenuis.

Rumpf. mus. t. 18. f. 1. 4. A. B.

Utcunque inter animalia ejusdem familiæ eadem fere sit formæ partiumque similitudo, pauca tamen proferri possunt exempla, in quibus a norma sua insigniter aberrare solet natura; præcipue vero in classe testacea. Testarum enim univalvium (ut dicuntur) incolæ, generi Limacis simillimi sunt; bivalvium contra generibus Tethyos et Ascidiaë. Formæ hujus anomalæ nullum notabilius argumentum possit feligi quam in genere Argonautæ; vel Nautili qui papyraceus dicitur: ab omnibus enim aliis ejusdem divisionis adeo discrepat animal

animal hanc testam inhabitans, ut illius verum esse et genuinum incolam non mirum sit si ægre credatur. Linnæus igitur de hac re scribit, “ Domunculam alienam, quemadmodum Cancer Diogenes seu Bernhardus, intrasse Sepiam, cum non connexa sit testæ, sibi adeo alienæ, qui non crederet, nisi tot testes nobis obfringerent, qui propriis oculis viderunt Argonautam velificantem ? ”

Extra testam visus Argonautæ habitator sepiaæ speciem, sepiam præcipue octopodiam admodum refert : nec sane ab ea forma generali differt, nisi quod ad extremitates brachiorum duorum membranas ovatas habeat, quas cum super mare pacatum navigat, erigit, reliquis sex brachiis remigans. Fieri non potuit ut miranda res hominum oculos effugeret : ideoque a variis auctoribus descriptam legimus ; nullis elegantius quam Plinio.

“ Inter præcipua autem miracula est, qui vocatur Nautilus, ab aliis Pompilos. Supinus in summa æquorum pervenit, ita se paulatim subrigens, ut emissâ omni per fistulam aqua, velut exoneratus sentina, facile naviget. Postea prima duo brachia retorquens, membranam inter illa miræ tenuitatis extendit ; qua velificante in aura, cæteris subremigans brachiis, media cauda, ut gubernaculo, se regit. Ita vadit alto, Liburnicarum ludens imagine, et si quid pavoris interveniat, hausta se mergens aqua.”

Cavendum est hanc testam, quæ verus est Argonauta, cum Nautilo communiter dicto, seu Nautilo *concamerato* confundamus, qui generis est omnino distincti. Crescit Argonauta Argo ab una uncia ad sex vel etiam octo. Mare Mediterraneum nec non Indicum incolit.



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London, Published April 1843 by F. O. Nodder, & Co. No. 15, Broad Street.

THE
ARGONAUT,
OR
PAPER NAUTILUS.



GENERIC CHARACTER.

Animal extremely resembling a Sepia.

Shell univalve, spiral, extremely thin.

SPECIFIC CHARACTER, &c.

ARGONAUT with whitish furrowed shell, with
the keel dentated on each side.

THE PAPER NAUTILUS.

NAUTILLE PAPIRACÉ.

Argenv. t. 5.

Notwithstanding the general similarity of structure which prevails amongst animals of the same tribe, there are yet some remarkable deviations from it. This is nowhere more conspicuous than in the testaceous tribe, in which the inhabitants of most of the Univalves bear a strong affinity to the genus *Limax*, or Slug, while those of almost all the Bivalves are distinguished by a striking similarity to the genera of *Tethys* and *Ascidia*. Amongst the instances of deviation from the general plan may
be

be adduced the very remarkable and curious genus Argonauta or Paper-Nautilus, which is inhabited by an animal of an appearance so widely removed from those of most of the Univalves, as almost to make doubtful the reality of its being the genuine and proper inhabitant of the shell in which it resides. Linnæus accordingly has well observed, that unless the evidence of so many eye-witnesses had enforced belief, it might have been reasonably imagined that an animal so unlike the rest of the tribe, was only a usurper of the shell; in the same manner as the Cancer Diogenes and a few others, which take possession of such vacant shells as happen to suit their convenience. The inhabitant of the Argonauta, if seen detached from its shell, might pass for a real Sepia, and bears so great a resemblance to the Sepia octopodia or eight-armed Cuttle-fish, that the principal difference consists in its being furnished at the extremities of two of its arms with a pair of membranes of an oval form, which, during its occasional navigations on the surface of a calm sea, it raises upright and expands to the gale; while by the assistance of the six remaining arms it rows itself along. It seems impossible that so curious a spectacle could have escaped the particular observation of mankind. Accordingly we find it described by various authors: by none however more elegantly than by Pliny, whose short and beautiful description, has generally been quoted by modern writers.

“ But amongst the principal miracles of nature is the animal called Nautilus or Pompilos. It ascends to the surface of the sea in a supine posture, and gradually raising itself up, forces out by means of its tube all the
water

water from the shell, in order that it may swim the more readily ; then throwing back the two foremost arms, it displays between them a membrane of wonderful tenuity, which acts as a sail, while with the remaining arms it rows itself along ; the tail in the middle acting as a helm to direct its course ; and thus pursues its voyage like a little ship ; and if alarmed by any appearance of danger, takes in the water and descends."

We must be careful not to confound this shell, which is the real and proper Nautilus, with the chambered or pearly Nautilus, which belongs to a very distinct genus. The *Argonauta Argo* is found of various sizes, from one to six or eight inches in length, or even larger. It is a native both of the Mediterranean and Indian seas.

SCORPIO AFER.



CHARACTER GENERICUS.

Pedes octo : infuper *Chelæ* duæ frontales.

Oculi octo : horum tres ad latus utrumque thoracis ; duo in tergo.

Palpi duo, cheliformes.

Cauda elongata, articulata, terminata Mucrone arcuato.

Pectines duo subtus, inter pectus et abdomen.

Lin. Syst. Nat. p. 1037.

CHARACTER SPECIFICUS, &c.

SCORPIO pectinibus 13-dentatis, manibus subcordatis pilosis.

Lin. Syst. Nat. p. 1038.

SCORPIO INDUS.

Degeer. inf. 7. p. 341. n. 3.

Inter omnia insecta hætenus cognita, quæ venenosæ et malignæ sunt indolis, Scorpiones primo semper numerari soliti sunt. Notandum tamen est vim veneni vel augeri vel minui pro diversa hominum vulneratorum idiosyncrasia, statuque ipsius animalis, majorive minorive impetu quo plaga infligitur. Concedendum etiam est vulgarem Scorpionem Europæum, multo magis

gis quam necesse est timeri, cujus ab aculeo vix aliquid mali potest evenire. At vero ingentes Africani Scorpiones, qualis est ille qui in tabula depingitur, vulnus infligere posse jure censetur, quod dolor acerrimus, virusque gravissimum solent comitari. Venenum per tria minutissima foramina prope apicem aculei exit, a summo fere apice et ab utroque latere. Notum est multum diuque dubitasse physicos sitne foramen necne, per quod venenum effunditur, in araneorum forcipibus. Similiter de foraminibus in scorpionis aculeo dubitatum est, immo pene ad lites perventum. Celeberrimus Redi, optimis licet vitris microscopicis tunc temporis instructus, non potuit foramen discernere; qui tamen revera illud extare minime dubitavit, quippe qui ab aculeo compresso guttulam quasi liquoris albescentis juxta apicem exprimi sæpe viderat. Alii autem multi ullum esse foramen plane negarunt. Vallisneri et Leewenhoeck foramina duo triangula clare visa descripserunt ab utroque latere prope apicem sita; alii tria detexerunt; unde patet Scorpionis aculeum venenum promptius efflare posse quam alius cujusvis animalis. Pars illa quæ Scorpionibus sub pectore sita est, quæque more pectinis denticulata est, hoc ipso nomine *pectinis* a Linnæo designatur; qui etiam diversas species numero dentium in pectine distinguere conatus est. Fefellit tamen multos hæc discriminandi methodus; pectinibus enim ejusdem speciei impar forsan sit numerus dentium; ideoque hoc solo signo species non possunt satis accurate dignosci. Species hic depicta est magnus Scorpio Africanus, a Linnæo Scorpio Afer nominatus. Color ejus communis est admodum fuscus, interdum pene nigricans. In magnam crescit molem, interdum multo majorem quam repræ-

repræsentat tabula. Vivipari sunt Scorpiones, et plurimos uno partu edunt pullos, qui perfecte formati, nullam aliam mutationem subeunt, nisi forte quod aranearum more exuvias abjiciant. Quæ scripserunt varia et mira de his animalibus antiquiores physici, aniles sunt fabulæ, quas præsens ævum, cui omnigena affulsit scientia, ægre et indigne audiat. Hæc igitur putida et inania lubens taceo. Unum tamen e plurimis fas mihi sit feligere; Scorpionem nempe carbonibus ignitis circumdatum, cum nullum sibi exitum patere viderit, salutem tandem desperantem, sui ipsius aculei ictibus perire. Hanc fabulam, quasi fide dignam, plures etiam nunc temporis, serio et graviter recitant, et pro unico suicidii exemplo inter inferiora animalia feligunt.

Fig. 2. Pectines.

THE
AFRICAN SCORPION.



GENERIC CHARACTER.

Eight *Legs*, besides the 2 frontal *Chelæ*.

Eight *Eyes*, viz. 3 on each side the thorax, and 2 on the back.

Two cheliform *Palpi* or feelers.

Tail long, jointed, terminated by a crooked *point*.

Two *Combs* beneath, between the thorax and abdomen.

SPECIFIC CHARACTER, &c.

SCORPION with 13-toothed combs and somewhat heart-shaped hairy claws.

Swammerd. bibl. nat. t. 3. f. 3.

Roef. inf. 3. t. 65.

Scorpions may be considered as the most malignant and poisonous of all known insects. It is true that the effect of their sting will differ greatly according to the different circumstances of the constitution of the person receiving the wound, as well as of the state of the animal itself, and the degree of violence with which the wound was inflicted. It is also to be acknowledged that the common European Scorpion is not in general
of



Centruroides eximius (Walckenaer) from Mexico by Dr. R. A. M. S. 1894. (Am. Mus. Nat. Hist.)

of so terrible a nature as is commonly supposed, and it is but rarely that any bad consequences happen from its sting. But the large Scorpions of Africa, such as here represented, may well be supposed capable of inflicting a wound of the most severe pungency and of the most dreadful malignity. The poison is evacuated through three very small foramina near the tip of the sting, viz. one on each side the tip, and the other in the upper part. It is well known that a diversity of opinion has subsisted amongst authors relative to the slit or foramen in the fangs of spiders, through which their poison is evacuated. The same contrariety of sentiment takes place with respect to such a foramen in the Scorpion's sting. The celebrated Redi, assisted by the best microscopes he could procure, was not able to discover it; though he was well convinced of its existence from perceiving the minute drop of poison exude from near the tip of the sting. Others have denied the existence of the foramen; but Vallisneri and Leewenhoeck have both described two foramina, viz. one on each side the tip, and which are of a shape inclining to triangular: besides these a third foramen has sometimes been seen; so that the sting of the Scorpion can with greater facility discharge its venom than that of any other animal. The part in Scorpions which is seated below the breast and is toothed in the manner of a comb, is in the Linnaean language termed the pecten; and Linnæus has endeavoured to distinguish the species of Scorpions from the number of teeth in this part; but this has been found a fallacious mark of distinction; since they vary in the number of teeth, and consequently no great certainty can be obtained from this character alone.

The

The very large species here represented is the great African Scorpion, or *Scorpio Afer* of Linnæus. Its general colour is a deep brown, nearly approaching in some specimens to black. It grows to a very large size; specimens being sometimes seen which far exceed in size the figure here represented. Scorpions are viviparous insects, and produce a very considerable number of young at once; which are completely shaped, and undergo no farther change, except (perhaps) casting their skin from time to time in the manner of spiders. Several fabulous anecdotes of these animals have been recorded by the older writers on natural history, which are totally unworthy of being related in the present enlightened age. One of the most remarkable of these legends is, that a Scorpion surrounded by live coals, finding no method to escape, grows desperate from its situation and stings itself to death. It is not uncommon to hear this quoted with serious credulity as the only instance of suicide amongst inferior animals.

Fig. 2. The pectinated parts or combs.

CERTHIA CARDINALIS.



CHARACTER GENERICUS.

Rostrum arcuatum, tenue, subtrigonum, acutum.

Lingua acuta.

Pedes ambulatorii.

Lin. Syst. Nat. p. 184.

CHARACTER SPECIFICUS, &c.

CERTHIA RUBERRIMA, alis caudaque nigris,
abdomine albido.

CERTHIA CARDINALIS?

Lath. ind. orn. p. 290.

CERTHIA RUBRA?

Gmel. Syst. Nat. 1. p. 479.

Inter minimas numeratur hæc avicula sui generis, fiftitque eam tabula magnitudine naturali. Forma generali Certhiæ cruentatæ Linnæi videtur fimillima. In insulis aliquibus Australibus nasci creditur; quicquid autem ad peculiare illius mores attinet incognitum omne et incertum est.

THE
CARDINAL CREEPER.



GENERIC CHARACTER.

Bill slender, incurvated, sharp-pointed.

Tongue differing in shape in the different species.

Legs moderately stout.

Toes placed three before, and one behind; back toe large: claws hooked and long.

Linnaeus. Latham. Pennant.

SPECIFIC CHARACTER, &c.

CARMINE-RED CREEPER, with black wings and tail, and whitish belly.

CARDINAL CREEPER.

Lath. Syn. 1 p. 733.

This bird may be numbered amongst the smallest of its genus, the figure representing it of its natural size. In its general appearance it seems extremely nearly allied to the *certhia cruentata* of Linnaeus, or red-spotted creeper. It is supposed to be a native of some of the Southern islands, but its particular history seems to be unknown.



J.N.

London, Published May 1st 1792

by A. D. Nodder & Co. No. 10. Brewer Street.

ASTERIAS CAPUT MEDUSÆ.



CHARACTER GENERICUS.

Corpus depressum: crusta subcoriacea, tentaculis muricata.

Os centrale, quinquevalve.

Lin. Syst. Nat. p. 1098.

CHARACTER SPECIFICUS, &c.

ASTERIAS radiis dichotomis, ore depresso.

ASTERIAS CAPUT MEDUSÆ.

Lin. Syst. Nat. p. 1101.

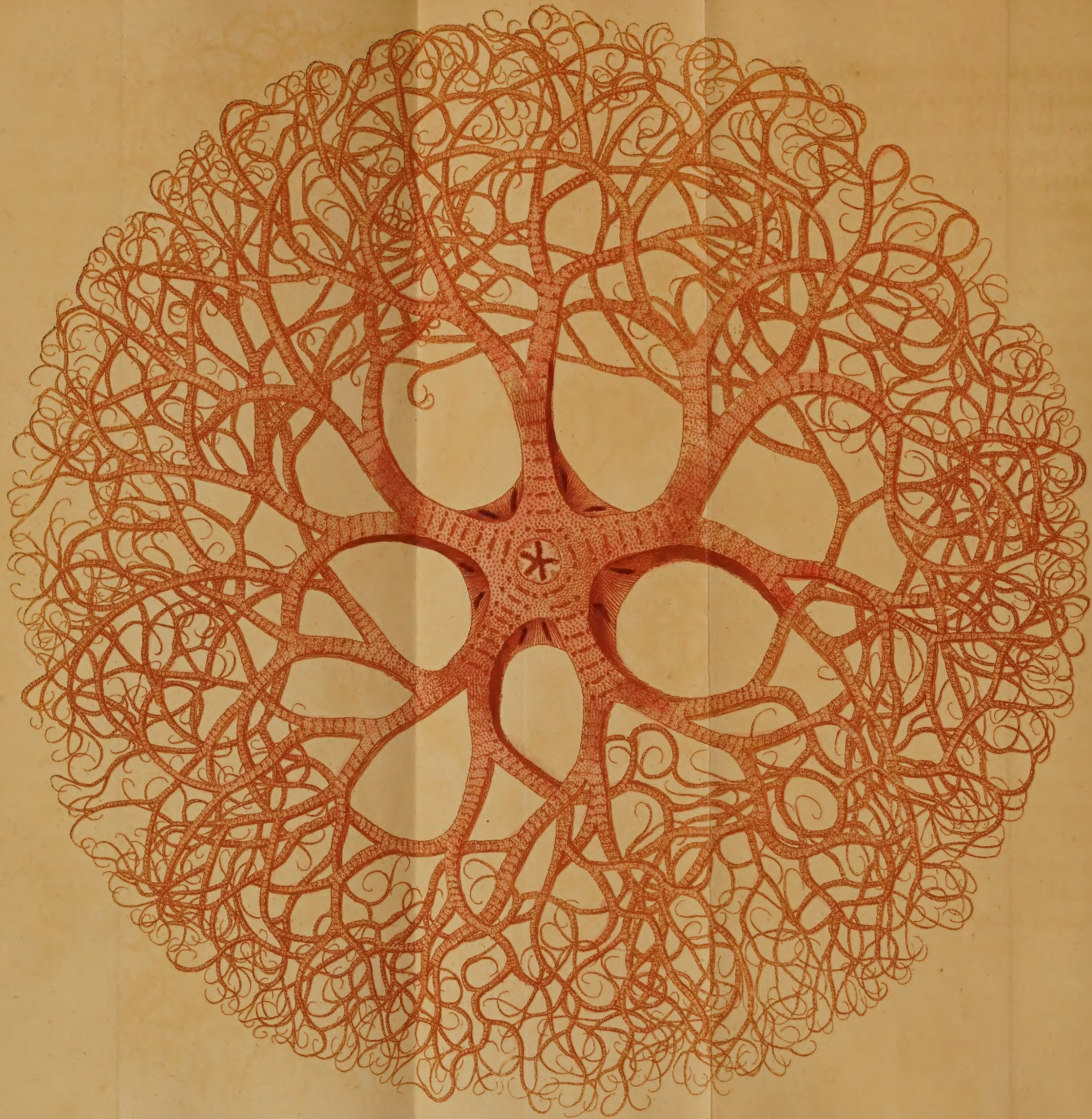
STELLA MARINA.

Fonst. inf. t. 26. f. 11.

Asteriæ, seu stellæ æquoræ, ut vulgo nominantur, mirum et numerosum constituunt genus animalium marinarum. Specierum diversarum diversa admodum est facies externa. Pars maxima formæ sunt stellatæ, seu in quinque radios æquales divisæ: aliæ in plures radios, decem nempe vel tredecim: nonnullæ scabræ et tuberosæ, nonnullæ læves, aliæ denique spinosæ sunt. Species vero reliquis longe mirabilior Asterias caput Medusæ vocatur. Hæc a centro in quinque æquales et æque distantes radios geniculatos primum dividitur, quorum singuli dein in duos alios minores divaricant;

hi iterum paulo longiore intervallo in duos adhuc minores separantur; et hoc modo, divisionibus minoribus et numerosioribus, infinita pene serie sensim attenuata et multiplicata, distribuuntur membra, donec millia multa numero superent. Inde fit ut animal quasi rete sit vivum, nec immerito *rete mirabile* possit dici, cum illa quæ pro cibo natura voluit animalia, contractis subito innumeris ramulis amplectatur, et adempta aufugendi potestate, misera devoret. Asteriæ facultatem repullulandi habent, membrumque aliquod vel casu vel vi abruptum aut avulsum progressu temporis renovatur. In oceano, præsertim prope littora cibi captandi gratia vagantur, animaliaque non tantum nuda et molliora sed etiam testis oblecta comedunt; dentibus enim duris et acutis spinas referentibus armantur, adeo fitis ut aculei omnes ad centrum convergant, dispares in diversis speciebus. Species hic depicta in oceano fere omni invenitur, præcipue in mari Mediterraneo. Colore variat: interdum pallida, seu rufo-albescens, interdum fuscescens, immo etiam penitus fusca reperitur. Asteriæ (fortasse,) ut plurimum, viviparæ? sunt.





THE
BRANCHED ASTERIAS,
OR
MEDUSEAN STAR-FISH.



GENERIC CHARACTER.

Body depressed; covered with a coriaceous crust,
mucicated with tentacula.

Mouth central, with five valves.

SPECIFIC CHARACTER, &c.

ASTERIAS, with regularly-divided and subdivi-
ded branches, and depressed mouth.

MEDUSA-HEAD STAR-FISH.

BASKET STAR-FISH.

The Asteriæ or sea-stars, as they are generally called, form a very numerous and wonderful genus of marine animals. The several species differ greatly in appearance from each other: the greater number are of a stellated form, and are divided into five rays or processes; others are divided into a much greater number of rays, as ten, and thirteen. Some species are smooth, some tuberculated, others prickly. The species which of all others is most worthy of admiration is that called the Caput Medusæ, or Medusa's Head Star-fish: this
very

very curious animal is first divided into five equidistant, thickly-jointed processes, each of which is soon subdivided into two other smaller ones, and each of these, at a somewhat farther distance, into two others still smaller: this mode of regular subdivision is continued to a vast extent, and in the most beautiful gradation of minuteness, till at length the number of the extreme ramifications amounts to several thousands. By this most curious structure the animal becomes as it were a living net, and may well deserve the title of *rete mirabile*, and is capable of catching such creatures as are by nature destined for its prey, by the sudden contraction of all its innumerable ramifications, by which the unfortunate object is secured beyond all possibility of escape. The sea-stars have a very considerable degree of reproductive power, and if injured by accidental violence, or if one or more of their limbs or branches be torn or cut off, the creature will in time be furnished with new ones. They wander about the ocean, particularly near the shores, in quest of food, and prey not only on the softer animals, but even on the smaller shell-fish; and are armed for this purpose with hard and sharp teeth, resembling prickles, and situated in a circular form, with the points converging towards the opening of the mouth, and differing in number in the different species. The species here represented is not uncommon in most seas, and is frequently found in the Mediterranean. In colour it varies, being sometimes pale, or reddish white, and sometimes of a brown, more or less intense. The *Asteriæ* in general are viviparous? animals.

PTINUS FATIDICUS.



CHARACTER GENERICUS.

Antennæ filiformes ; articulis ultimis majoribus.

Thorax subrotundus, immarginatus, caput excipiens.

Lin. Syst. Nat. p. 565.

CHARACTER SPECIFICUS, &c.

PTINUS fuscus subpilosus, griseo irregulariter maculosus.

DERMESTES TESSELATUS ??

Fabr. Syst. Ent. p. 56. *Sp. inf.* p. 65.

PTINUS PULSATOR ?

Gmel. Syst. Nat. p. 1605.

Ex ineptiis omnibus quæ imbecillos vulgi animos occuparunt, inanior nulla est quam mortifagi, ut dicitur, metus; qui parvulum licet insectum, ruris quietem perturbare, vanisque et falsis terroribus totum pagum solebat implere. Dominatur etiam nunc in populorum animis superstitiosa ista sollicitudo, nequique fugare has tenebras quod jam fere per totum orbem diffunditur scientiæ et veritatis lumen. Fatendum quidem est, illis qui in pane quotidiano comparando totum fere tempus

terere

terere coguntur, deesse tum otium tum mentem ut in causam peculiaris alicujus sonitus accurate philosophiceque inquirant: mirum tamen est insectum commune non penitus cognosci, nec melius intelligi unde sonitus exoriatur.

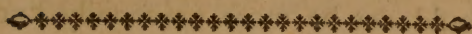
Vere jam provecto, mutuo se convocare solent formidata hæc animalcula, eodem fere modo quo aves; licet non sit vera vox, sed pulsatio capitis clypeati in duram aliquam substantiam. Audiuntur ictus septies, novies, vel undecies; quod ipsum fortasse majorem vulgo metum incutit. Repetuntur sonitus celeriter, incertis intervallis, et in domibus antiquis, ubi maxima est Mortisagorum copia, per totum fere diem possunt audiri; præsertim si calidior sit aeris temperies. Exacte imitari poteris hos ictus si unguem modice in mensam impingas. Cum colori ligni veteris simillimus sit color mortisagi, inquiringentis oculus diu eluditur. Longus est circiter quadrantem unciae, modica crassitie. Ad coleoptera pertinet, quorum nempe alæ elytris seu tegumentis corneis munitæ sunt; licet enim rarissime volet, volatilis est. Referri debet proculdubio ad genus *Ptinus* dictum. Miror nec inveniri eum in editione duodecima systematis naturæ Linnæi, nec in opere entomologico Fabricii, ni forte *Dermestes tessellatus* idem sit, quod si fiat, erravit Fabricius in genere. In volumine vigesimo, nec non in vigesimo secundo Actorum Anglicorum, nec male, describitur, additis observationibus celeberrimi Derhami, qui de animalculi forma moribusque recte differuit. Vereor ne quod falsum et ineptum sit asserere videar, cum dicam posse mortisagum, in pyxide servatum, ad id mansuetudinis et docilitatis perducī, ut mensæ impositus pulsanti alicui prompte respondeat.

respondeat. Cavendum est ne hoc insectum, (quod verus est rusticorum mortifagus pulsatorius,) cum alio confundamus, quod interdum eodem nomine dicitur, quodque horologii more diu et sine ulla intermissione sonum edit; pertinet enim hoc ad ordinem penitus diversum, nomine *Termitis pulsatorii* a Linnæo distinctum. Claudet hanc Mortifagi descriptionem quod in opere celeberrimo, *Pseudodoxia* scilicet *Epidemica*, observavit vir doctissimus Thomas Brown. “ Qui ab animis populi unicum hanc superstitionem posset evellere, ille profecto a pavidis nutricum et aviarum capitibus sudoris multum gelidi depelleret.”



London, Published May 1st 1798 by F. & J. Wadsworth & Co. No. 15 Bowyer Street

THE
BEATING PTINUS,
OR
DEATH-WATCH.



GENERIC CHARACTER.

Antennæ filiform; the last joints larger than the others.

Thorax roundish, immarginated, receiving the head.

SPECIFIC CHARACTER, &c.

Dusky and somewhat hairy PTINUS, with irregular grey-brown spots.

THE DEATH-WATCH.

Phil. Transf. vol. 20. p. 376. vol. 22. p. 832.

Amongst the popular superstitions which the almost general illumination of the present century has not been able to obliterate, the dread of the Death-watch may well be considered as one of the most predominant; which, though nothing more than a small insect, still continues to disturb the habitations of rural tranquillity with groundless fears and absurd apprehensions.

It

It is not indeed to be imagined that they who are engaged in the more important cares of providing the immediate necessities of life should have either leisure or inclination to investigate with philosophic exactness the causes of a particular sound: yet it must be allowed to be a very singular circumstance that an animal so common should not be more universally known, and the cause of the particular noise which it occasionally makes, be more generally understood. It is chiefly in the advanced state of spring that this alarming little being commences its sound; which is no other than the call or signal by which the insects of this species mutually attend to each other, and which may be considered as analogous to the call of birds; though not owing to the voice of the insect, but to its beating on any hard substance with the shield or fore part of its head. The prevailing number of distinct strokes which it beats, is from seven to nine or eleven, which very circumstance may perhaps still add in some degree to the ominous character which the animal bears amongst the vulgar. These sounds or beats are given in a pretty quick succession, and are repeated at uncertain intervals; and in old houses where the insects are numerous, may be heard almost every hour of the day; especially if the weather be warm. The sound exactly resembles that which may be made by beating moderately hard with the nail on a table.

The insect is of a colour so nearly resembling that of decayed wood, viz. an obscure greyish brown, that it may for a considerable time elude the search of the inquirer. It is about a quarter of an inch in length, and is moderately thick in proportion. It belongs
to

to the class of coleopterous insects, or such as have horny or shelly sheaths defending their wings, for it is a winged insect, though rarely seen in flight. The genus to which it unquestionably belongs is that of *Ptinus*; but it is remarkable that it does not occur in the twelfth edition of the *Systema Naturæ* of Linnæus; nor has Fabricius distinctly mentioned it in his entomological works, unless his *Dermestes tessellatus* be intended for the same insect, in which case he must have placed it in a wrong genus. In the twentieth and twenty-second volumes of the *Philosophical Transactions* it has been long ago described, and some very just observations made relative to its habits and general appearance, by the celebrated Mr. Derham, and it is extremely singular that so remarkable an insect should have almost escaped the notice of more modern entomologists. Ridiculous, and even incredible as it may appear, it is an animal that may in some measure be tamed; at least it may be so far familiarized as to be made to beat occasionally, by taking it out of its confinement and beating on a table or board, which it readily answers, and will continue to beat as often as required.

We must be careful not to confound this insect, which is the real Death-watch of the vulgar, (emphatically so called,) with another insect, which makes a sound like the ticking of a watch, and which continues its sound for a long time without intermission: it belongs to a totally different tribe from the Death-watch, and is the *Termes pulsatorium* of Linnæus. I shall conclude this description of the Death-watch by a sentence from the celebrated work *Pseudodoxia Epidemica*,

Epidemica, or Vulgar Errors, by the learned Sir Thomas Brown, who expresses himself in some such words as these. "He that could eradicate this error from the minds of the people would save from many a cold sweat the meticulous heads of nurfes and grandmothers."

LOXIA CARDINALIS.



CHARACTER GENERICUS.

Rostrum conico-gibbum, frontis basi rotundatum
versus caput: Mandibula inferior margine
lateralis inflexa.

Nares in basi rostri.

Lingua integra.

Lin. Syst. Nat. p. 299.

CHARACTER SPECIFICUS, &c.

LOXIA CRISTATA RUBRA, capistro nigro,
rostro pedibusque sanguineis.

Lin. Syst. Nat. p. 300.

COCCOTHAUSTES RUBRA.

Catesb. Carol. 1. p. 38. t. 38.

COCCOTHAUSTES VIRGINIANA CAR-
DINALIS dicta.

Briss. av. 3. p. 252.

LOXIA CARDINALIS.

Lath. ind. orn. p. 375.

E calidioribus Americæ Septentrionalis partibus in
Europam jamdudum illata est Loxia Cardinalis. Ob
colorem lautum splendidumque vocemque potentem et
suaviloquam apud nos magni semper habita est, nec de-
sunt qui eam ipsi luscinia vix ac ne vix cedere existi-
mant. Ingenio est alacri, vivido, docilique.

THE
CARDINAL GROSBEAK.



GENERIC CHARACTER.

Bill strong, thick, and convex.

Nostrils small.

Tongue truncated.

SPECIFIC CHARACTER, &c.

CRESTED RED GROSBEAK with black
frontlet.

VIRGINIAN NIGHTINGALE.

Raii. Syn. p. 85.

Will. orn. p. 245. pl. 44.

CARDINAL GROSBEAK.

Lath. Syn. 2. p. 118.

The bird here figured is a native of the warmer parts of North America, from whence it was imported soon after the first discovery of that continent; and from the glowing splendor of its colour, and the extraordinary powers of its note, soon became a distinguished favorite in Europe. It is even by some considered as scarce inferior to the nightingale. It is a bird of a lively nature, and possesses a considerable degree of docility.



Cardinalis Rubra Linn. *stipitata* F. L. Nodder del. 1795. *Bonaparte* Sculp.

ISIS HIPPURIS.



CHARACTER GENERICUS.

Flores Hydræ, sparsi e floribus lateralibus.

Stirps radicata, lapidea, rigida, sæpe articulata.

Lin. Syst. Nat. p. 1287.

CHARACTER SPECIFICUS, &c.

ISIS stirpe corallina, articulis striatis, geniculis attenuatis.

Lin. Syst. Nat. p. 1287.

ACCABARIUM ALBUM.

Rumpf. Amb. 6. p. 228. t. 84.

HIPPURIS SAXEA.

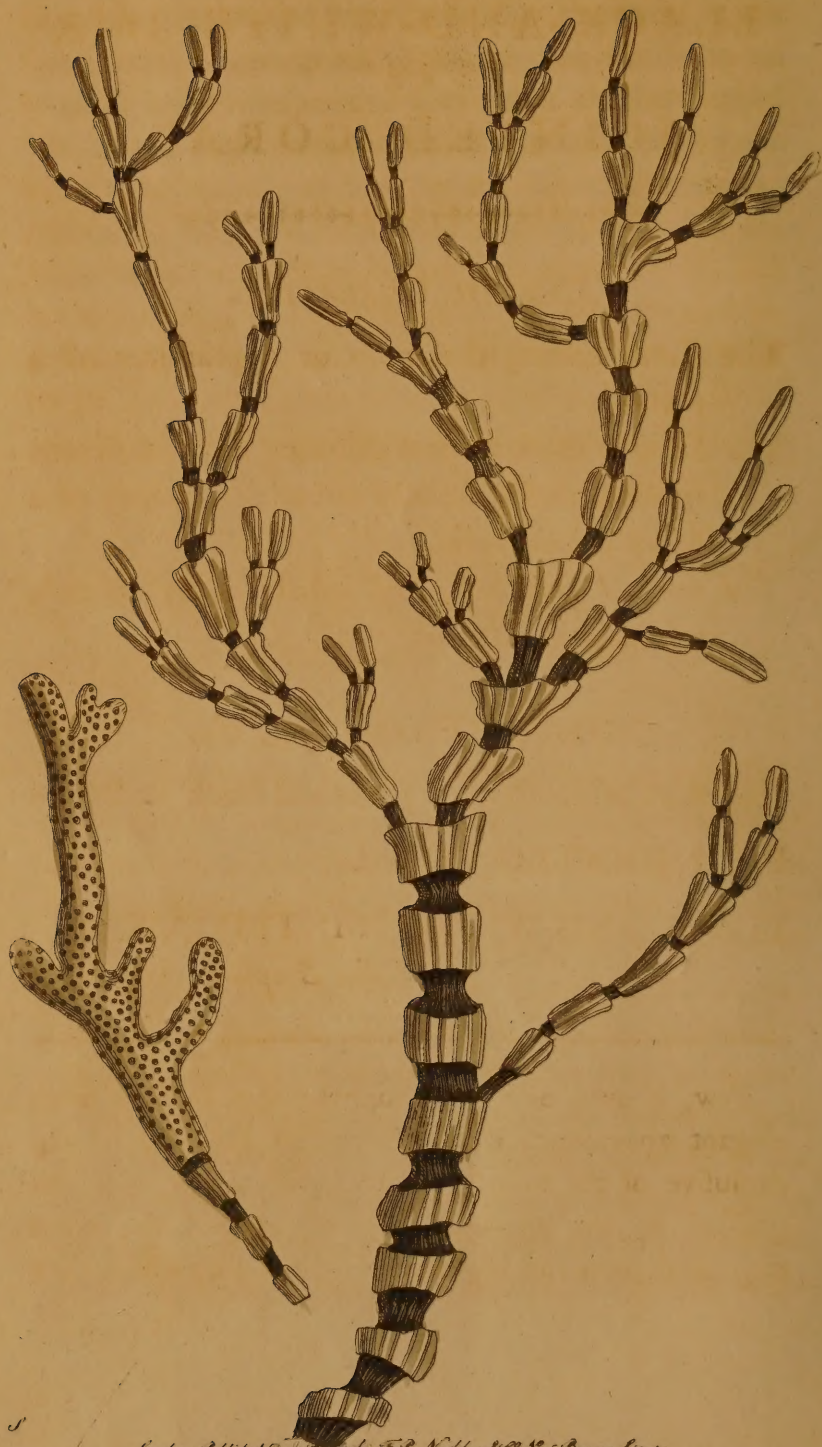
Clus. exot. 124.

LITHOPHYTON articulatum internodiis striatis.

Gualt. test. 118. fig. 16.

Jactare fane possunt perpauca Lithophyta elegantiorē faciem quam hæc, de qua jam agitur, species. Ne quid enim dicam de ramulorum pulchritudine, bella est oppositio albarum expansarumque partium, nigrorumque quibus connectuntur geniculorum. Notandum tamen est pulchrum hunc aspectum non esse ipsius naturæ;

turæ ; hæc enim vestivit isdem cortice albo et spongi-
oso, foraminibus parvulis creberrime excavato, in qui-
bus, cum adhuc recens sit lithophytum, habitant ani-
malia polypos referentia, quæ ipsum corallium ædifi-
casse creduntur. Crescit Isis Hippuris in variis mundi
partibus, in mari præcipue Indico. Diversæ extat mag-
nitudinis, alta interdum paucas uncias, interdum duos
fere pedes.



London, Published by J. G. & J. W. Nodden & Co. 17, as Brown Street.

THE
BLACK-AND-WHITE ISIS,
OR
JOINTED CORAL.



GENERIC CHARACTER.

The *Coral* having the habit or appearance of a plant.

The *Stem* or internal part differing in the different species, and generally either of a horny or a stony appearance.

The *cortical part* soft, and inhabited by animals resembling polypes.

SPECIFIC CHARACTER, &c.

ISIS with white striated joints and black junctures.

PIED JOINTED CORAL.

BLACK AND WHITE JOINTED CORAL.

Ellis. Zooph. p. 105. t. 3.

Few, if any, of the Lithophytes can boast a more elegant appearance than the present species; which, exclusive of the neatness of its ramifications, is distinguished by the agreeable contrast between the white expanded parts and the black internodia by which they
are

are united. It is to be observed, however, that this beautiful appearance is very different from that of the same coral in its natural state; in which it is coated over by a soft or spongy whitish part, thickly marked with small foramina, which in the recent Lithophyte are the habitations of so many animals resembling polypes; the supposed fabricators of the coral. The *Isis Hippuris* is produced in several parts of the world, but is chiefly found in the Indian seas. It is found of various sizes, from a few inches to nearly two feet in height.

CERCARIA MUTABILIS.



CHARACTER GENERICUS.

Vermis nudo oculo inconspicuus, subpellucidus, caudatus.

CHARACTER SPECIFICUS, &c.

CERCARIA VIRIDIS, (interdum rubra,) corpore cylindraceo mutabili, cauda acuminata sub-bifida.

CERCARIA VIRIDIS ?

Müll. *anim. infus.* p. 126. tab. 19.
fig. 6—13.

Ostenditur in tabula animalculum, situ varium, microscopio summopere auctum. Hujusmodi æstivis men-
sibus densissima super paludes conglomerantur agmina,
adeo ut interdum tota superficies rubra videatur seu
viridis; alias ipsius aquæ corpus vel hoc vel illo colore
non leviter tingatur. Forma limaci, motu hirudini
fimilior est cercaria. Cum huic, ut et aliis multis ani-
malculis, summa sit contractionis vis, hinc fit ut nunc
fere in orbem colligatur, nunc in diversissimos longitu-
dinis gradus ad libitum extendatur. Motu incedit tar-
diusculo; cumque natet penitus explicata, utraque ex-
tremitas pellucida videtur, corpusque granulis virenti-
bus aut rubellis, piscium ova non male referentibus,
refertum.

refertum. Caput seu anterior pars obtusior, cauda autem acuta, apicem interdum levissime bifurca; quod tamen vix ac ne vix conspici possit. Cum in reliquis omnibus prorsus conveniant cercariæ in tabula depictæ, nisi quod hæ sint rubræ, illæ virides, nolumus ob so- lam coloris differentiam vere distinctas pronunciare. Virides sæpissime mensibus Maii et Junii, interdum citius, mane plerumque et vespere aquarum stagnanti- um superficiem occupant, medio die fundum petentes. Rubræ, quæ longe rariores, aquas nonnunquam quasi in sanguinem convertunt; narrantque auctores univer- sos populos hoc signo ingenti stupore perculos: quod sane vulgo facile condonari possit; causam enim sæpif- sime ignorent necesse est, cum ipsa animalcula sine microscopii ope non nisi acutissimo oculo conspici pos- sint. Vidi egomet non semel magnam paludem una nocte rubore obductam et sanguine veluti perfusam, cujus die proxime elapso ne minimum erat vestigium. Notandum est etiam eodem fere modo, licet minus, decolorari paludes a monoculo pulice Linnæi, nec-non a larva culicis communis, aliisque multis. Quid igitur mirum, anteaactis temporibus, cum adhuc curta esset philosophia, vitrique optici ignoraretur usus, si homi- nes vani et meticulosi aquas sanguineum rubentes con- spicati, Deos illico infestos et præfens aliquod exitium pertimuerint? Immo narrat celeberrimus Swammer- damus totam Lugduni civitatem hac ipsa re supra modum attonitam, aquis primo mane immenso (ut postea compertum est) animalculorum agmine quasi cruentatis: nec dubitamus quin species eadem fuerit cum hac nostra quam descripsimus. Hoc præterea omine turbatos Romanorum animos, inter alia quæ
Cæsar

Cæsaris fatum aut præibant aut sequebantur portenta,
memoravit Virgilius.

“ nec tempore eodem
Tristibus aut extis fibræ apparere minaces,
Aut puteis manare cruor cessavit.”



THE CHANGEABLE CERCARIA.



GENERIC CHARACTER.

Worm unobservable by the naked eye, somewhat pellucid, tailed.

SPECIFIC CHARACTER.

GREEN CERCARIA, (sometimes red,) with cylindric mutable body, and slightly bifid pointed tail.

The animalcule of which microscopical figures, very highly magnified, are represented on the annexed plate, is amongst those legions of animated beings which, in the warmer months, contribute to people the generality of stagnant waters; sometimes covering the whole surface with a continued sheet of a red or green colour, and sometimes diffusing a strong tinge of those colours throughout the whole mass or body of the water. The general shape of this animalcule is not much unlike that of a slug, but its motions are more analogous to those of a leech. In its postures it is infinitely variable, possessing, like many others of the animalcular

animalcular tribe, the highest degree of contractile power; in consequence of which it occasionally appears in all the various states of elongation and contraction represented in the plate; and not unfrequently reduces itself to a globular form. Its motions are rather slow than swift, and when swimming at full length it generally appears transparent at both extremities, while the body seems filled with a congeries of globules or grains of a green or reddish colour, and not ill resembling the spawn of fish. The head or fore-part is obtuse, but the tail or extremity is acute, and sometimes exhibits a slight appearance of bifurcation at the tip; but this is a particular which in general is scarce to be perceived. The difference in colour between these animalcules seems hardly sufficient to justify our regarding them as specifically distinct; since both the green and the red sort are so perfectly alike in other respects that no difference can be perceived between them. The green sort may be very frequently observed in most stagnant waters in the months of May and June, and sometimes much sooner, appearing commonly on the surface in the evening and early in the morning, and retiring towards the middle of the day to the bottom. The red variety is far less common, and the appearance which it sometimes exhibits is such as to alarm a superstitious mind with the idea of the water being tinged with blood: a panic of which numerous instances have been adduced by authors; and which is the more excuseable in those who are ignorant of the cause, as the animalcules are so extremely minute as to be utterly imperceptible, (except to an uncommonly sharp

sharp eye,) without the assistance of a glass ; so that even taking up the water and examining it affords to the vulgar no satisfactory elucidation. I remember to have more than once observed the whole surface of a large moat or pool completely covered in the space of a single night with this animalcule, when the day before there was not the least appearance of discoloration in the water : the whole surface appeared as if covered with florid blood. It should be observed that several other species of animalcules sometimes give the same tinge to stagnant waters, though in a far less striking degree : thus the *monoculus pulex* of Linnæus is frequently so numerous as to redden the water : the larva of the common gnat has also been known to produce a similar discoloration.

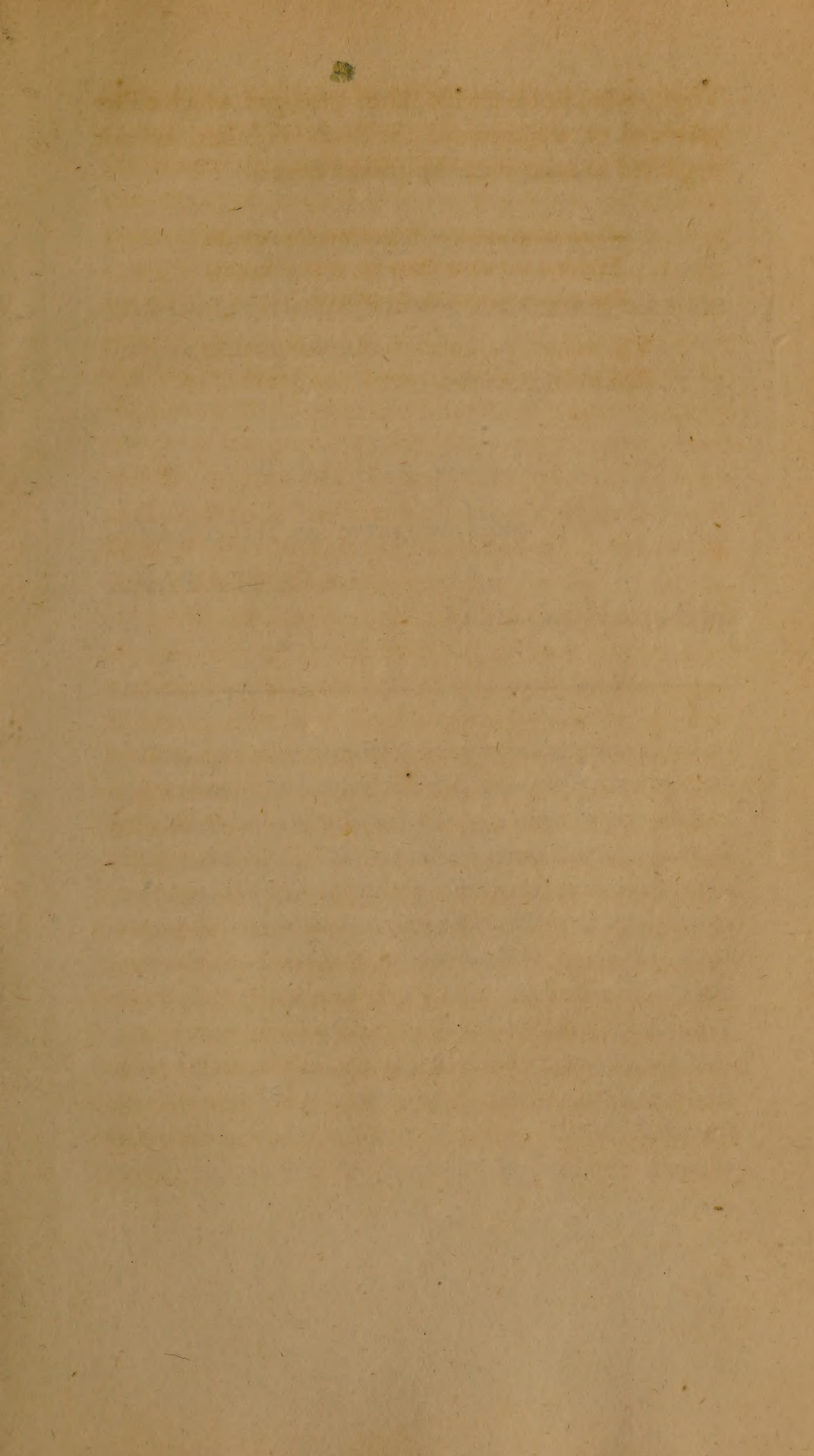
These are appearances which in less enlightened ages, unassisted by the microscope, have so often filled the minds of the people with the most terrible apprehensions, and have been regarded either as the precursors of some great calamity, or magnified into the immediate symptoms of heavenly displeasure. We are assured by the celebrated Swammerdam that the city of Leyden was in a state of consternation on discovering one morning that the waters of that place were apparently changed into blood ; which, upon accurate examination, was found to be owing to no other cause than prodigious numbers of minute red animalcules, (in all probability of the very same species here represented.) For the effect which such appearances produced on the minds of the ancients, it may be sufficient to recal to the recollection of the reader the words of

Virgil,

Virgil, who, in his terrific list of prodigies which either preceded or accompanied the death of Julius, has not neglected to enumerate this phænomenon.

“ nec tempore eodem
Tristibus aut extis fibræ apparere minaces,
Aut puteis manare cruor cessavit.”

The trembling priest o'er boding victims stood,
And wells, portentous omen! flow'd with blood.



fitus. Tota avis, remigibus albis exceptis, coloris est aterrimi. Rostrum amoenissime rubrum, cute implumi, quæ basin cingit, super frontem late et ultra oculos excurrente. Apici mandibulæ superioris nigricanti prope adjacet macula flava. Crura nigra, pedes paulo pallidiores.

Amicissime nobiscum communicavit exemplum fideliter depictum, unde figuram hanc nostram mutuati sumus, Thomas Wilson armiger, quod ei nuperrime miserat cum aliis multis hujusmodi cimeliis Dominus White, Novæ Hollandiæ chirurgus præcipuus.



London. Published July 18 1792, by T. P. Nodden & Co. No. 15. Bow Lane Street.

THE
BLACK SWAN.



GENERIC CHARACTER.

Bill broad and flattened; the edges marked with sharp lamellæ.

Tongue broad and ciliated at the edges.

SPECIFIC CHARACTER.

BLACK SWAN with white remiges.

To vulgar ears a black swan has the sound of a miracle: but this arises merely from annexing the proverbial name to the common swan, so emphatically distinguished by its constant snowy plumage, from which it was never known to vary: but no one could ever rationally be supposed to call in question the possible existence of some distinct species of this numerous genus, which, however nearly allied in point of size and habit to the common swan, might yet be naturally black. In fact such a species is now discovered. It is a native of New Holland, and the neighbouring islands, and is accurately represented on the plate annexed. In general appearance it bears the most striking resemblance to the common swan, and is remarkable for all those gracefully-varying attitudes which so eminently distinguish

distinguish the European species. The whole bird, except the long wing-feathers, which are white, is of the deepest and fullest black: the beak is of a fine red, and the skin surrounding the base is continued high over the forehead and beyond the eyes: the tip of the upper mandible is blackish, and near the tip is a spot of yellow. The legs are black; the feet somewhat paler.

The original drawing of this most curious bird, accurately taken from the life, and from which the present figure is copied, was obligingly communicated by Thomas Wilson, Esq. of Gower Street, to whom it was sent, together with many other non-descript animals, &c. by Mr. White, chief surgeon to the English settlement at New South Wales.

MYRMECOPHAGA ACULEATA.

CHARACTER GENERICUS.

Dentes nulli.

Lingua teres, extensilis.

Os angustatum in rostrum.

Corpus (plerisque) pilis tectum.

CHARACTER SPECIFICUS.

MYRMECOPHAGA ACULEATA, cauda brevissima.

Digna est quæ penitus examinetur hæc species, non modo quod nova prorsus sit et adhuc inaudita, sed quod in ea insigne detur exemplum miræ istius gradationis qua genera diversissima interdum sibi invicem appropinquant. Vinculum videtur esse hæc quo connectuntur genera satis distincta *Hystricis* et *Myrmecophagæ*, cum enim huic sit facie vestituque similior, illius habet rostrum verosque characteres. Pedem circiter unum longa est, quatenus a speciminibus adhuc visis colligi possit: deest igitur figuræ nostræ plusquam dimidia pars magnitudinis naturalis. Totum corpus superius cum cauda spinis contegitur validis et longioribus, quales omnino sunt hystricis vulgaris, nisi quod vice circulorum qui alternatim albi nigrique, plerumque albeant, apicibus altius nigro tinctis, quodque
albedo

albedo a nigredine separetur annulo parvo sordide aurantio. Aliæ vero spinæ totæ albescent, si excipias extremitates levissime nigricantes. Caput, crura, corporisque partes inferiores e fusco nigricant, vestiunturque pilis seu setis potius densissimis. Caudæ brevioris apicem denudatæ et paululum complanatæ superficies superior spinis contegitur perpendicularibus, illas saltem longitudine æquantibus quæ in dorso cernuntur. Rostrum longum, nudum, nigrum, tubulatum, eodem modo formatum quo rostrum *Myrmecophagæ jubatæ*, in apice rictum habet minimum, unde lingua lumbriciformis longe protruditur, qualis est etiam *Myrmecophagarum*. Nares parvæ, ad extremum rostri sitæ. Oculi minimi, nigri, iride cærulea. Crura brevissima, crassissima, digitis quinque instructa. Pedum anticorum digitis sunt ungues quinque validissimi, longi, obtusiusculi, nigricantes: posticorum quatuor tantum (pollex enim cæteris latior, ungue caret,) quique differunt inter se: prior scilicet est longissimus, paululum curvatus, et acutus; secundus paulo brevior, sed similiter formatus; reliqui duo multo breviores, aliquatulum curvi, et obtusiusculi. Vivit proculdubio hæc species more aliarum *Myrmecophagarum*, in tumulo enim quem congefferant formicæ primo deprensa est, ideoque nomine *Hystricis formicariæ* distincta. Ad nos a Nova Hollandia allata est.

Cum nuperrime detectum sit hoc animal, neminem scientia naturali vel leviter imbutum latere possit minus quam antea convenire Linnæanos characteres generi *Myrmecophagæ*. Cum igitur quæ in generibus *Manis* et *Myrmecophagæ* continentur animalia vestitu solo differant, huic enim corpus squamosum, illi pilosum; satius forsan

forſan foret duo hæc genera conjungere, annumerata iis
noviſſima hac ſpecie, et ex parte charaſterum dicere
Corpus vel pilis vel ſquamis vel aculeis veſtitum: ni no-
vum omnino genus inſtituatur, a generibus Manis et
Myrmecophagæ in hoc tantum diſcrepans, quod nec
ſquamis, nec pilis, ſed aculeis contegatur.

THE PORCUPINE ANT-EATER.



GENERIC CHARACTER.

Body (in most species) covered with hair.

Snout tubular; mouth small; no teeth.

Tongue cylindric, long, extensile.

SPECIFIC CHARACTER.

SPINY ANT-EATER with very short tail.

This extraordinary animal may well be considered amongst the most curious and interesting quadrupeds yet discovered; since it is not only an absolutely new and hitherto unknown species, but is also a most striking instance of that beautiful gradation, so frequently observed in the animal kingdom, by which creatures of one tribe or genus approach to those of a very different one. It forms a connecting link between the very distant genera of *Hystrix* and *Myrmecophaga*; having the external coating and general aspect of the one, with the mouth and peculiar generic characters of the other. This animal, so far as can be judged from the specimens hitherto observed, is about a foot in length: the figure consequently represents it of nearly half the natural size. The whole upper parts of the body and tail are



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are thickly coated with strong, sharp spines, of a considerable length, and perfectly resembling those of the common porcupine, except that instead of being annulated with several alternate rings of black and white, as in that animal, they are mostly white, with black tips, the colour running down to some little distance on the quill, and being separated from the white part by a circle of dull orange: others are entirely white, or at least have but a slight appearance of black towards the tips. The head, legs, and whole under parts of the body are of a deep brown or sable, thickly coated with strong, close-set, bristly hair. The tail is short, bare, slightly flattened at the tip, and coated on the upper part of the base, with spines at least equal in length to those of the back, and seated perpendicularly upwards. The snout is long and tubular, and perfectly resembles in structure that of the *Myrmecophaga jubata*, or great ant-eater; having only a very small opening or rictus at the tip, from whence is protruded a long lumbriciform tongue, as in the ant-eaters. The nostrils are small, and seated near the extremity of the snout. The eyes are very small, and black, with a pale-blue iris. The legs are very short and thick, and are each furnished with five rounded broad toes: on the fore feet are five very strong, long, and blunt claws, of a black colour; seated on each toe. On the hind-feet are only four claws, the thumb, which is broader than the rest of the toes, being destitute of a claw. The first claw on the hind-feet is extremely long, somewhat curved, and sharp-pointed; the next rather shorter, but of similar appearance; the two remaining ones far shorter, very slightly curved, and not sharp-pointed.

In

In its mode of life this animal beyond a doubt resembles the Myrmecophagæ, having been found in the midst of an ant-hill; for which reason it was named by its first discoverers the ant-eating porcupine. It is a native of New Holland.

It cannot escape the observation of every scientific naturalist, that in consequence of the discovery of this curious animal, the Linnæan character of the genus Myrmecophaga is in part rendered inapplicable. Since therefore the animals in the genera of *Myrmecophaga* and *Manis* differ only in the external coating of the body, the former being covered with hair and the latter with scales, it would perhaps be not improper to conjoin the two genera, to add this as a new species, and to give as part of the generic character *Corpus pilis, squamis, vel aculeis tectum*. But if this be not done, it would perhaps be proper to make this animal constitute a new genus, which would differ from the genera of *Manis* and *Myrmecophaga* in having the body coated with aculei, instead of hair as in the *Myrmecophaga*, or of scales as in the *Manis*.

CICADA PLEBEIA.



CHARACTER GENERICUS.

Rostrum inflexum.

Antennæ setaceæ.

Alæ quatuor, membranaceæ, deflexæ.

Pedes (plerisque) saltatorii.

Lin. Syst. Nat. p. 705.

CHARACTER SPECIFICUS, &c.

CICADA scutelli apice bidentato, elytris anastomosibus quatuor, lineisque sex ferrugineis.

Lin. Syst. Nat. p. 707.

Mouss. inf. 127.

Adr. inf. 307.

Matth. Diosc. 264.

Cicada, quam sæpissime memorant poetæ antiqui, quamque communiter cum gryllo vulgari seu campestri confundunt plerique interpretes, Europam incolit calidiorem, in Italia et Græcia, ut plurimum reperta. Species notissima, seu cicada plebeia Linnæi quam depinximus, æstate calidissima conspicitur, ramoque insidens per totum fere diem stridulum canit et acutum. In Italia est altera species, (quæ cicada orni Linnæi) huic simillima, sed minor. Majorum cicadarum variæ
sunt

sunt species, adeo inter se similes, ut revera licet diversæ, easdem tamen putarent incuriosi spectatores. Omnes ab ovis originem ducunt, quæ deponunt parentes in arborum radicibus juxta terram, quæque in larvas excluduntur, a veteribus scriptoribus Tettigometrarum nomine distinctas. Peracto duorum annorum spatio, exuvias ponunt larvæ, perfectumque nascitur insectum. Figura tertia Tettigometram seu larvam cicadæ plebeïæ monstrat. Notandum est in Britannia plurimas esse cicadarum species; parvulæ tamen sunt, nec vocem seu stridorem notabilem emittunt.



THE COMMON CICADA.



GENERIC CHARACTER.

Beak inflected.

Antennæ setaceous.

Wings four, membranaceous, deflected.

Feet (in most species) formed for leaping.

SPECIFIC CHARACTER.

CICADA with the scutellum bidentated at the tip, the elytræ marked with four anastomoses and six ferruginous lines.

The Cicada, so often commemorated by the ancient poets, and so generally confounded by the major part of translators with the grasshopper, is a native of the warmer parts of Europe, and is particularly plentiful in Italy and Greece. The most common species, or cicada plebeia, here represented, appears in the hotter months of summer, and continues its shrill chirping during the greatest part of the day; sitting amongst the leaves of trees. In Italy there is another species, (the cicada orni, Lin:) which bears a very great general resemblance to the former but is considerably less: indeed amongst the larger cicadæ there are several sorts, which,

which, though really distinct, are yet so very nearly allied to each other, as to be easily regarded, on a cursory view, as the same species. All the cicadæ proceed from eggs, which are deposited by the parent insects in and about the roots of trees, near the ground : they hatch into larvæ, which, when grown to a certain size, are the Tettigometræ of the older writers. These larvæ, after having continued in this state two years, cast their skins and produce the complete insect. Fig. 3. shews the larva or Tettigometra of the cicada plebeia. I should observe that in our own country we have several species of this genus, which however are extremely small, and are not distinguished by any sound sufficient to excite attention.

I N D E X.

- PL. **A**MPHISBÆNA
 86. rosea.
 108. Anas Plutonia.
 101. Argonauta Argo.
 103. Asterias Caput Medusæ.
 99. Casuarius Australis.
 94. Coluber nasicornis.
 107. Cercaria mutabilis.
 102. Certhia Cardinalis.
 75. Certhia coccinea.
 110. Cicada plebeia.
 106. Isis Hippuris.
 82. Isis nobilis.
 83. Lacerta varia.
 89. Lacerta unistriata.
 105. Loxia Cardinalis.
 79. Madrepora Fungites.
 95. Mantis strumaria.
 78. Merops superbus.
 91. Monoculus Polyphemus.
 109. Myrmecophaga aculeata.
 77. Papilio Helena.
 92. Papilio Ulysses.
 85. Phalangium cancroides.
 90. Platalea Ajaja.
 87. Psittacus concinnus.
 93. Psittacus eximius.
 96. Psittacus pulchellus.
 104. Ptinus fatidicus.
 76. Rana cornuta.
 80. Scarabæus Goliathus.
 100. Scorpio Afer.
 97. Silurus Callichthys.
 84. Tetrao Porphyrio.
 81. Trochilus multicolor.
 98. Tubipora musica.
 88. Xiphias platypterus.

I N D E X.

- PL. **A**MPHISBÆNA
 86. rose-coloured.
 103. Asterias Medusa-Head.
 109. Ant-Eater Porcupine.
 80. Beetle fork-headed.
 78. Bee-Eater superb.
 77. Butterfly black-and-gold.
 92. Butterfly radiated.
 99. Cassowary Southern.
 107. Cercaria changeable.
 75. Creeper scarlet.
 102. Creeper Cardinal.
 110. Cicada common.
 82. Coral common red.
 106. Coral black-and-white.
 104. Death-watch.
 76. Frog horned.
 105. Grosbeak Cardinal.
 81. Humming-bird Harlequin.
 89. Lizard single-striped.
 83. Lizard variegated.
 95. Mantis broad-breasted.
 79. Madrepora Mushroom.
 91. Monoculus Indian.
 101. Nautilus paper.
 96. Parrakeet turcosine.
 87. Parrakeet crimson-fronted.
 93. Parrot nonpareil.
 84. Partridge violaceous.
 85. Phalangium cancroid.
 100. Scorpion African.
 97. Silurus wandering.
 94. Snake horn-nose.
 90. Spoon-bill rose-coloured.
 88. Sword-Fish broad-finned.
 108. Swan black.
 98. Tubipore crimson.

VIRO CELEBERRIMO
THOMÆ PENNANT
ARMIGERO,
NATURÆ INDEFESSO INDAGATORI,
CUJUS
STUDIO ET ACUMINE
PHYSICIS
TUM EXTERIS
TUM PRÆCIPUE NOSTRATIBUS
PROVECTOR, ORNATOR, LOCUPLETIOR,
TRADITA EST SCIENTIA,
QUARTUM HUNC
NATURÆ VIVARII
FASCICULUM,
D. D. D.
GEORGIUS SHAW,
FREDERICUS P. NODDER.

TO
THOMAS PENNANT
ESQUIRE,
FROM WHOSE LITERARY LABOURS
NATURAL HISTORY IN GENERAL,
AND THAT OF
GREAT BRITAIN IN PARTICULAR,
HAS RECEIVED SUCH AMPLE IMPROVEMENTS,
THIS FOURTH VOLUME
OF THE
NATURALIST'S MISCELLANY
IS
WITH MUCH RESPECT INSCRIBED,
BY
HIS MOST OBEDIENT HUMBLE SERVANTS,
GEORGE SHAW,
FREDERICK P. NODDER.

PIPRA PUNCTATA.



CHARACTER GENERICUS.

Rostrum capite brevius, basi subtrigonum, integerrimum, apice incurvum.

Pedes gressorii.

Lin. Syst. Nat. p. 338.

CHARACTER SPECIFICUS.

PIPRA grisea, fusco undulata, vertice alisque nigris, albo punctatis, tectricibus caudæ rubris.

Femina? minus vivida, capite maculis flavescens.

Plura de hac avicula, quam plene describit character specificus, dicere supervacaneum habui, nisi quod species prius apud nos incognita, a Nova Hollandia nuperime advenerit. De modo vivendi nihil est quod proferre possum; de hoc enim prorsus filetur.

THE SPECKLED MANAKIN.



GENERIC CHARACTER.

Bill shorter than the head, somewhat triangular at the base, bent at the tip.

Feet gressorial.

SPECIFIC CHARACTER.

GREYISH-BROWN MANAKIN, undulated with dusky, the top of the head and the wings black speckled with white, the coverts of the tail red.

The supposed female is less vivid in colour, and the head is spotted with yellowish.

Of this bird, which is fully described by its specific character, it is unnecessary to say more than that it is a new species; having been lately received from New Holland, but unaccompanied by any particulars relative to its manner of life.



London, Published Augth 1st 1792 by F. & J. Nodder & Co. No. 25. Brewer Street.

MEDUSA INFUNDIBULUM.



CHARACTER GENERICUS.

Corpus gelatinosum, orbiculatum (plerisque) de-
depressum.

Os subtus centrale.

CHARACTER SPECIFICUS, &c.

MEDUSA OVATA, costis ciliatis novem.

Gmel. Syst. Nat. p. 3152.

VOLVOX BEROE.

Lin. Syst. Nat. p. 1324.

In Insulæ Jamaicæ historia formosam hanc Medusæ
speciem primus notasse videtur Dominus Browne; cujus
descriptionem cum lectoribus lubentissime communi-
cavi.

Forma est ovata, obtuse aëtangula, cava, extreni-
tate majore aperta, pellucida, substantia firma et gelata.
Facillime se contrahit et dilatat; inter natandum semper
expansa. Radii longitudinales validiores ad verticem,
unde quasi a stella pulchra et oblonga affurgunt, ad
marginem sensim attenuati. Singuli autem serie ten-
taculorum gracilium breviumque ornantur, quæ hinc
inde

inde ad arbitrium animalis a summo ad imum celerrime
moventur. Membrorum mollium et tenellorum quasi
undatim se invicem assequi properantium incitati cursus,
variique et sole reperiussi colores nequeunt facile verbis
exprimi. Circa insulas Jamaicæ occiduas frequenter
spectantur hæc animalia, raro tres pollices cum dimidio
pollicis longitudine superantia, duosque vel duos cum
dimidio in diametro.



THE FUNNEL MEDUSA.



GENERIC CHARACTER.

Body gelatinous, orbicular, in most species depressed.

Mouth beneath, central.

SPECIFIC CHARACTER.

OVATE MEDUSA with (commonly) nine ciliated ribs.

The elegant species of *Medusa* here represented, appears to have been first observed by Dr. Patrick Browne, who, in his *History of Jamaica*, has described it in the following words :

“ This beautiful creature is of an oval form, obtusely octangular, hollow, open at the larger extremity, transparent, and of a firm gelatinous consistence. It contracts and widens with great facility, but is always open and expanded when it swims or moves. The longitudinal radii are strongest at the crown or smaller extremity, where they rise from a very beautiful oblong star, and diminish gradually from thence to the margin : but each of them is furnished with a single series of short, delicate, slender appendixes or limbs, that move
with

with great celerity either the one way or the other, as the creature pleases to direct its flexions, and in a regular accelerated succession from the top to the margin. It is impossible to express the liveliness of the motions of these delicate organs, or the beautiful variety of colours that rise from them while they play to and fro in the rays of the sun; nor is it easy to express the speed and regularity with which the motions succeed each other from one end of the rays to the other."

These animals are frequently seen about the western islands of Jamaica: they seldom exceed three inches and a half in length, or two and a half in the largest transverse diameter.

PAPILIO NESTOR.



CHARACTER GENERICUS.

Antennæ apicem versus crassiores, sæpius clavato-capitatae.

Alæ (sedentis) erectæ sursumque conniventes.

(*Volatu* diurno.)

Lin. Syst. Nat. p. 744.

CHARACTER SPECIFICUS, &c.

PAPILIO alis dentatis supra fuscis albo maculatis discoque cæruleo, subtus ocellis tribus quatuorque.

Fabr. Spec. Inf. 2. p. 24.

PAPILIO alis dentatis : supra fuscis maculis discoque cæruleis, subtus ocellis tribus binisque.

Lin. Syst. Nat. p. 752.

Eq. Achiv.

Papilionem Achillem in hoc opere jam descriptum magnitudine fere æquat, forma eleganti superat Papilio Nestor. Alarum oræ profunde denticulatae sunt, mediaque pars, seu discus es lucidissime cæruleus ; limbi autem

autem sunt nigri, maculis lunatis albis et cærulescentibus, ut et figura demonstrat, notati. Americam Australem incolit papilio Nestor. Inferior superficies est fusca, maculas habens ocellatas, marginibus centrisque albidis.



S. N.

London, Published Augth 1844 by F. P. Nodder & Co. No. 16 Brewer Street.

N E S T O R.



GENERIC CHARACTER.

Antennæ or *Horns* thickening towards the upper part, and generally terminating in a knob, or club-shaped tip.

Wings (when fitting) erect, and meeting upwards. (*Flight* diurnal.)

SPECIFIC CHARACTER, &c.

BUTTERFLY with indented blackish wings with bright-blue disk and white spots; the under surface brown, with larger and smaller ocellated spots.

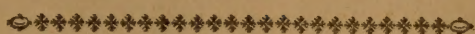
Mer. Sur. t. 9.

Cram. 2. t. 19. f. A. B.

The *Papilio Nestor* is nearly equal in size to the *P. Achilles*, which has already been figured in the present work; but is more elegant in shape, the wings being deeply indented or scalloped round the edges. The chief or middle part of all the wings is of the richest brilliant blue: the edges are black marked with
lunated

lunated spots of white and blueish, as represented in the figure. It is a native of South America. The lower surface is brown, with some ocellated spots with whitish margins and centres.

MOTACILLA HIRUNDINACEA.



CHARACTER GÉNÉRICUS.

Rostrum subulatum, rectum: mandibulis subæqualibus.

Nares obovatæ

Lingua lacero-emarginata.

Lin. Syst. Nat. p. 328.

CHARACTER SPECIFICUS.

MOTACILLA? chalybeo-nigra, gula pectore
crisilloque phoeniceis, abdomine niveo fascia
longitudinali nigra.

Speciem hanc, Novæ Hollandiæ incolam, in Angliam non ita pridem illatam, ignorasse videntur ornithologi. Vultu est paululum ambiguo, et dubitari forsan possit an hirundini potius quam motacillæ sit similior. Cum vero prorsus sit impossibile avis penitus novæ (præsertim si ipsum specimen vel tantillum læsum sit) verum et certum locum in systemate designare; nomen igitur triviale dedi, quod admoneat ulterius quærendum esse, si detur aliquando occasio accuratius examinandi.



London, Published Sep. 8 1795, by F. & C. Neill & Co. No. 15. Brewer Street.

THE
SWALLOW WARBLER.



GENERIC CHARACTER.

Bill subulated (or owl-shaped;) strait; the mandibles nearly equal.

Nostrils nearly oval.

Tongue jagged, or lacerated towards the tip.

SPECIFIC CHARACTER.

BLACK WARBLER? with a gloss of steel-blue, throat breast and vent crimson, abdomen white with a longitudinal band of black.

This is a species hitherto unknown to ornithologists: it is an inhabitant of New Holland, and was very lately brought into this kingdom. Its general appearance seems to be somewhat doubtful, and it may be thought perhaps to make as near an approach to the genus *Hirundo* as to that of *Motacilla*. As it is impossible, however, in new species, especially when the specimens have received the smallest injury, to ascertain with perfect precision their true place in system, I have therefore

therefore applied to this bird a trivial name which may serve as a hint for farther inquiry, should opportunity offer, of examining the species in a more accurate manner.

GRYLLUS LAURIFOLIUS.



CHARACTER GENERICUS.

Caput inflexum, maxillosum, palpis instructum.

Antennæ setaceæ, seu filiformes.

Alæ quatuor, deflexæ, convolutæ: inferiores plicatæ.

Pedes postici saltatorii. *Ungues* ubique bini.

Lin. Syst. Nat. p. 693.

CHARACTER SPECIFICUS, &c.

GRYLLUS thorace subtetragono lævi trilobo,
alis lanceolatis elytro obtusiore longioribus.

Lin. Syst. Nat. p. 695.

LOCUSTA thorace tetragono lævi, alis lanceolatis elytro longioribus.

Fab. spec. inf. 1. p. 356.

LOCUSTA maxima viridis, alis latissimis.

Sloan. jam. 2. p. 201. t. 236. f. 1.

Nomen inde adeptum est hoc insectum quod alarum thecæ seu elytra Lauri foliis simillima sint. In generibus Grylli et Mantidis multis speciebus facies est quasi foliata;

foliata; quod voluisse quodammodo videtur Natura,
ut in arborum coma versantes ab avium aliorumque
hostium rapacitate fiant securiores. Reperitur hæc
grylli species in America.



N

London, Published September 12th 1792, by T. P. Volden & Co. No. 15 Brewer Street.

THE BAY-LEAVED LOCUST.



GENERIC CHARACTER.

Head inflected, armed with jaws, and furnished with palpi or feelers.

Antennæ either setaceous or filiform.

Wings four, deflected, convolute; the inferior ones plaited.

Hind-feet formed for leaping. Claws on all the feet double.

SPECIFIC CHARACTER, &c.

LOCUST with smooth and somewhat tetragonal thorax, and wings (commonly) rather longer than the wing-sheaths.

THE BAY-LEAVED LOCUST.

This insect has obtained its name from the strong general resemblance which the upper or outer wings bear to the leaves of the Bay tree. Several species in the genera of *Gryllus* and *Mantis* are highly remarkable for this leaf-like appearance, which seems intended in some measure as a security to the animals from

from the attacks of birds and other creatures while
seated amongst the foliage of the trees which they
frequent. This species is a native of many parts of
America.

TRIGLA CATAPHRACTA.



CHARACTER GENERICUS.

Caput loricatum lineis scabris.

Membr: branch: radiis septem.

Digiti liberi ante pinnae pectorales.

CHARACTER SPECIFICUS, &c.

TRIGLA digitis geminis, rostro furcato elongato,
corpore octagono.

Lin. Syst. Nat. p. 496.

TRIGLA cirris plurimis, corpore octagono.

Art. gen. 46. *syn.* 75.

Piscium loricatorum seu *cataphractorum*, ut dicuntur, vix elegantior est species quam quæ in tabula depingitur. Unica est e Triglis quæ hoc tegmine defenditur, cum reliquis omnibus hætenus cognitis squamæ parvulæ obductæ sint. Caput mire conformatum: rostrum enim late bifurcum, apicibus obtusis; quod vel solum hunc piscem satis distinguat a Cotto cataphracto aliisque nonnullis, cum quibus fortasse eum spectator

C

incuri-

incuriosus, notisque quæ genus discriminant parum
versatus, posset confundere. Color albido-fusco-pallet.
Longa est, ut plurimum, Trigla cataphracta circiter
sex uncias. In mari nascitur Mediterraneo.



London, Published Sept. 1, 1892 by J. P. Nodder & Co. No. 45, Brewer Street.

THE MAILED GURNARD.



GENERIC CHARACTER.

Head covered with long plates.

Branchiostegous membrane with seven rays.

Appendages situated before the pectoral fins.

SPECIFIC CHARACTER, &c.

GURNARD with two pectoral appendages, elongated forked snout, and mailed body.

THE MAILED GURNARD.

Amongst the mailed or cataphracted fish, the species here represented is one of the most elegant. It is the only species of *Trigla* which is distinguished by this peculiar kind of coating; all the others yet known being covered with small scales. The form of the head is singular; the snout or upper jaw being widely bifurcated, with the divisions or processes obtuse. This forked appearance of the head is alone sufficient to distinguish this fish from the *Cottus cataphractus* and some others, with which an incurious spectator, not attending

ing to its generic characters, might perhaps be in danger of confounding it. Its colour is a very pale whitish brown, and its usual length about six inches. It is a native of the Mediterranean sea.

C R A X A L E C T O R .



CHARACTER GENERICUS.

Rostrum basi cera obductum in utraque mandibula.

Pennæ caput tegentes revolutæ.

Lin. Syst. Nat. p. 269.

CHARACTER SPECIFICUS, &c.

C R A X cera flava, corpore nigro, ventre albo.

Lin. Syst. Nat. p. 269.

GALLUS INDICUS.

Sloan. Jam. 2. p. 302. t. 260.

MITUPORANGA.

Raii. Syn. p. 52. 6.

Crax Alektor e maximis est gallinacei generis. In America Australi abundat, caroque ejus in deliciis habetur. Fit cicur nullo fere negotio. Coloribus nonnunquam variat. Femina fusco-ferruginea est.



London, Published Oct. 3. 1779 by T. B. Neale & Co. 135. Broad Street.

THE
COMMON CURASSOW.



GENERIC CHARACTER.

Bill on both mandibles covered with a cere.

Feathers on the head revolute.

SPECIFIC CHARACTER, &c.

BLACK CURASSOW with yellow cere; the lower part of the abdomen white.

LE HOCCO DE LA GUIANE.

Briss. orn. 1. p. 298. pl. 29.

MITUPORANGA.

Will. orn. p. 161. pl. 28.

The Crax Alector or black Curaffow is one of the largest of the gallinaceous tribe. It is common in South America, where it is much esteemed as an article of food. It is easily domesticated, and is sometimes subject to vary in colour. The female is of a ferruginous brown.

MADREPORA CEREBRUM.



CHARACTER GENERICUS.

Animal Medusa.

Corallium cavitatibus lamelloso-stellatis.

Lin. Syst. Nat. p. 1272.

CHARACTER SPECIFICUS, &c.

MADREPORA subglobosa, anfractibus longissimis tortuosis, prominentiis plano-obtusis.

MADREPORA composita, labyrinthiformis hemisphærica, lamellis duplicato ordine integris obtusis, sinibus æqualibus.

Hort. Cliff. 489.

MADREPORA MEANDRITES.

Pall. el. zooph. p. 292. n. 171.

CORALLIUM CEREBRI FACIE.

Petiv. gaz. t. 68. n. 11.

Varia est hujus Madreporæ magnitudo. Interdum paucas tantum uncias, interdum duos pedes diametro superat. Forma illi est fere sphærica, perfectior tamen in certis speciminibus. Ob similitudinem quam habet superficies

superficies parti externæ corticatæ seu cinericiæ (ut vocatur) in quadrupedum cerebro, nomen illi inde commune *Lapis cerebri* inditum est. Alia est species, huic de qua jam loquimur fimillima, quamque primo visu eandem putares; et sane dubitari possit sitne hujus varietas; differt enim tantum in gyris prominentibus, qui compressiores et acutiores, non complanati. Notandum est Madreporis rotundatis non raro inesse duo vel tria foramina, diametri non exiguæ, ad cylindros in ipso corallio terebratos ducentia. Non videntur hujusmodi foramina naturæ opus esse, sed aliorum animalium, Terebellarum nempe (ut vocantur) quæ corallium perforant, interdumque in imis hisce tubis quasi in cubile jacentes reperiuntur.



London, Published Oct. 1791 by T. P. Wadley & Co. 10. Brewer Street.

THE BRAIN MADREPORE.



GENERIC CHARACTER.

Animal resembling a Medusa.

Coral marked with lamellar striated cavities.

SPECIFIC CHARACTER, &c.

NEARLY GLOBULAR MADREPORE, with
very long tortuous undulations, the promi-
nent ones terminating flattish.

THE GREAT BRAIN-STONE.

The Madreporé represented on this plate is found of various sizes, from a few inches to upwards of two feet in diameter. Its form is nearly globular, but much more accurately so in some specimens than in others. From the general resemblance which the undulated surface bears to the cortical or exterior part of the brain in quadrupeds, it has obtained its common title of Brain-stone. There is another species which in size and general appearance so very nearly resembles the present, that on a cursory view it would readily pass for the same; and indeed can scarce be regarded in any
other

other light than that of a variety. The difference consists in the prominent undulations, which in that species are of a more compressed form, so as to rise with a sharp edge; not flattened as in the present species. I should observe that in the globular Madreporæ are often, and indeed generally, seen one or two or more round orifices of considerable diameter, and which lead to cylindrical perforations in the body of the coral. These holes do not seem so much owing to the natural structure of the Madreporæ itself, as to the operation of other animals, such as *Terebellæ*, which are sometimes found imbedded in these tubes.

MANTIS SICCIFOLIA.



CHARACTER GENERICUS.

Caput nutans maxillosum, palpis instructum.

Antennæ (plerisque) setaceæ.

Alæ quatuor, membranaceæ, (plerisque) convolutæ; inferiores plicatæ.

Pedes antici compressi, subtus ferrato-denticulati, armati ungue solitario et digito setaceo laterali articulado. *Postici* quatuor læves, gressorii.

Thorax linearis, elongatus, angustatus.

Lin. Syst. Nat. p. 689.

CHARACTER SPECIFICUS, &c.

MANTIS thorace denticulato, femoribus ovatis membranaceis.

Lin. Syst. Nat. p. 689.

Roef. inf. 2. t. 17. fig. 45.

Edw. av. t. 258.

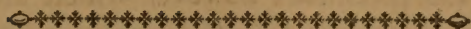
Omnibus Mantin hanc obiter intuentibus, præcipue si alarum thecæ seu elytra claudantur, in mentem venit folii mortui exsiccatique similitudo. Verisimile est vivæ virefcere potius colores quam subfufcari: quæ tamen in Europam illata sunt specimina respondent tabulæ. Cum

ei alarum inferiorum rudimenta tantum sint, non impossibile est quin revera sit larva speciei cujusdam hactenus non plene cognitæ et descriptæ; ni potius e numero sit illorum insectorum quæ constanti naturæ consilio alis carent, quorum multa sunt non solum in classe *Hemiptera* sed et *Coleoptera*; in certis scilicet *Cimicis*, *Carabi*, aliorumque speciebus.



London, Published Oct. 1792 by F. & J. Neadler & Co. in Bowyer Street.

THE DRY LEAF MANTIS.



GENERIC CHARACTER.

Head unsteady; Mouth armed with jaws, and furnished with palpi.

Antennæ fetaceous, (some few species excepted.)

Wings four, membranaceous, in most species convoluted: the lower ones (generally) plicated.

Feet anterior compressed, ferrated beneath, armed with a lateral solitary claw and jointed process; *posterior* four smooth, formed for walking.

Thorax (in most species) elongated and narrowed.

SPECIFIC CHARACTER, &c.

MANTIS with denticulated thorax and ovate membranaceous thighs.

THE WALKING LEAF.

Edw. pl. 258.

The very remarkable shape and colour of this insect uniformly suggest the idea of a dried or withered leaf, which the animal, when its wings are closed, so much

much resembles, that, on a cursory view, it might easily be mistaken for such. It is not improbable that in a recent state the colour may be rather green than brownish: the specimens however which are brought into Europe are generally of the tinge represented in the plate. It is remarkable that this curious animal has merely the rudiments of under or lower wings. It is therefore not improbable that it may in reality be the larva of some species not yet fully described; or else that it is a species which is naturally apterous; a circumstance of which several instances occur, not only in the class *Hemiptera*, but also in that of *Coleoptera*; as is sufficiently proved in some species of *Cimex*, *Carabus*, and others.

TANTALUS RUBER.



CHARACTER GENERICUS.

Rostrum longum, subulatum, teretiusculum, sub-
arcuatum.

Facies ultra oculos nuda.

Lingua brevis, lata.

Saccus jugularis nudus.

Nares ovatae.

Pedes tetradactyli, basi palmati.

Lin. Syst. Nat. p. 240.

CHARACTER SPECIFICUS, &c.

TANTALUS facie rostro pedibusque rubris, cor-
pore sanguineo, alarum apicibus nigris.

Lin. Syst. Nat. p. 241.

NUMENIUS brasiliensis coccineus.

Briss. av. 5. p. 344. t. 29. f. 1. 2.

NUMENIUS RUBER.

Catesb. Car. 1. p. 84. t. 84.

NUMENIUS INDICUS.

Clus. exot. 366.

Avium nitidissimarum parens orbis occiduus paucas
alit hac splendidiores, cui totus vestitus, exceptis remi-
gum longiorum apicibus, latissime est coccineus. Ros-

E

trum

trum pedesque pallentes rubent. Varias licet America
partes incolat, in australioribus tamen frequentior est.
Magnitudine Numenio communi fere æqualis est, eo-
demque propemodum utitur vivendi modo.

N^o

London, Published Nov. 1st 1792, by F. & J. Nodder & Co. N^o 15 Brewer Street.

THE
SCARLET IBIS.



GENERIC CHARACTER.

Bill long, thick at the base, incurvated.

Face, and sometimes the whole head, naked.

Nostrils linear.

Tongue short.

Toes connected at the base by a membrane.

Lath. Syn. 3. p. 104.

SPECIFIC CHARACTER, &c.

SCARLET IBIS with red beak and legs; the
wings tipped with black.

SCARLET IBIS.

Lath. Synops. 3. p. 106.

RED CURLEW.

Catesb. Car. 1. p. 84. pl. 84.

Amongst the brilliant birds of the western Continent few are more conspicuous than the present; the whole plumage of which, except the tips of the wings, is of the brightest and most vivid scarlet. The bill and legs are of a pale red. It is found in many parts of America, but is most common in the southern provinces. Its size is nearly that of a Curlew, which it also resembles in its manner of life.

GORDIUS AQUATICUS.



CHARACTER GENERICUS.

Corpus filiforme, æquale, læve.

Lin. Syst. Nat. p. 1075.

CHARACTER SPECIFICUS, &c.

GORDIUS pallidus extremitatibus nigris.

Lin. Syst. Nat. p. 1075.

SETA, s. vitulus aquaticus.

Aldr. inf. 720. t. 765.

GORDIUS SETA.

Müll. hist. verm. 1. 2. p. 30. n. 161.

SETA PALUSTRIS.

Planc. conch. app. c. 22. t. 5. f. F.

Vermis iste, setæ simillimus, qui Gordius vocatur, in aquis mollibus et stagnantibus præcipue cernitur, idque fere omni tempore, frequentius autem æstivo. Longus, ut plurimum, vix quatuor uncias, pertingit interdum ad quinque vel etiam sex. Color communis fusco-pallet, extremitatibus nigricantibus, vel saltem magis infuscatis reliquo corpore. Nomen Gordii, quod et generi commune, inde adeptus est, quia contorquere se et colligere soleat

soleat quasi in nodum qui *Gordius* nuncupatur. Cum diu manserit convolutus, iterum in pristinam longitudinem gradatim se explicat. Interdum in aquis movetur more hirudinis, satis celeriter; alias cunctanter, gressuque quo nihil concipi potest languidius. Nomen vulgare *Hair-worm*, non ob formam solummodo datum est; sed quod eum revera ortum esse a feta quæ ab equo seu alio animali in aquas deciderat, olim crediderit indoctum vulgus, etiamnum erroris tenax. Si Gordius digitum morfu læserit, paronychiam non raro excitare dicitur: idque in Suecia subinde accidere a Linnæo memoratur fide non modo rusticorum, sed experimento viri eruditi, naturæ et veritatis studiosissimi. Possum quoque egomet testimonium proferre hominis fide dignissimi, qui mihi retulit, Gordium, quem incaute nuda manu ex aquis eripuit, extremum sibi digitum vulnerasse, indeque exortam esse paronychiam. An insit morfui peculiaris quædam irritatio, an ab alia qualibet punctura idem proveniret effectus, vix ausim dicere. Piaculum foret, si de Gordio locutus morbum nomine *Venæ Medinensis* cognitum filerem, qui oritur a Gordii specie quæ in calidioribus mundi regionibus (cum adhuc forte parvula sit) sub cutim irrepere dicitur, ibique in magnam crescere longitudinem, et difficillime extrahi, dolorem summum molestiamque excitans. Nec prætereundum est, gordii speciem, (ipsum fortasse vulgarem dum adhuc junior) in animalibus variis præter omnem expectationem inveniri; in scarabæis scilicet, crucis, aliisque insectis. Immo memini meipsum in cerebro Lacertæ aquaticæ Linnæi Gordios adeo exiguos observasse, ut cum microscopio accurate eos examinasset, uncix millesimam partem vix superare viderentur.

Vitæ

Vitæ tenacissimus est Gordius vulgaris, et quamvis in aqua servatus quasi mortuus multas horas jaceat, postea tamen integrari videntur pristinae vires. Notandum est reperiri eum non modo in aqua sed interdum in ipsa terra; in hortis præcipue post pluviam, et in humo argillacea, in qua facillime et liberrime se movere solet.

THE
COMMON GORDIUS,
OR
HAIR-WORM.



GENERIC CHARACTER.

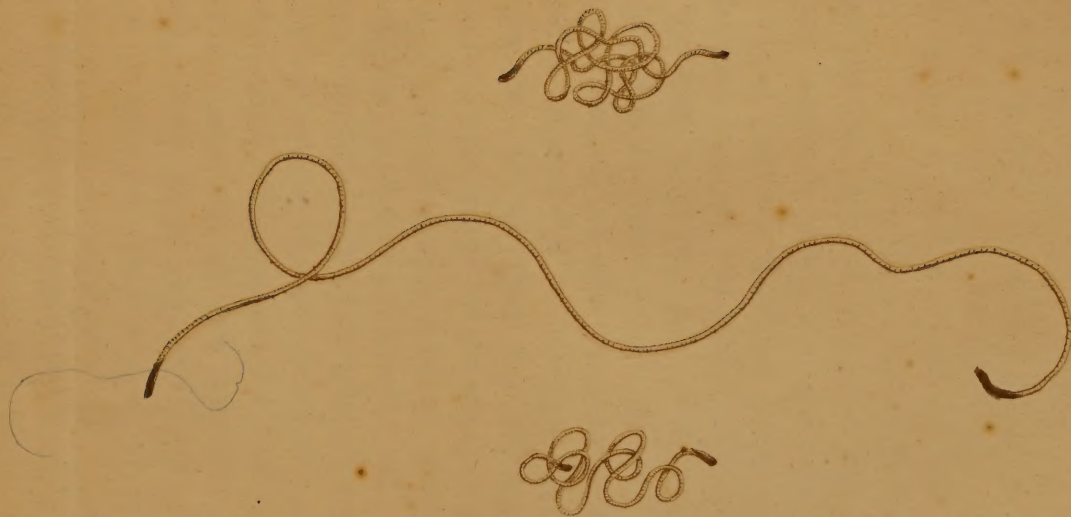
Body filiform, equal, smooth.

SPECIFIC CHARACTER, &c.

PALE-BROWN GORDIUS with dark extremities.

THE COMMON HAIR-WORM.

The Gordius aquaticus or common Hair-Worm is principally an inhabitant of soft stagnant waters, and may be found during the greatest part of the year, but is most plentiful in the summer months. It grows to the length of five or six inches, but is not very often seen of more than about four inches. Its most general colour is a palish brown, with the extremities blackish, or at least darker than the other parts. It has obtained the generic name of Gordius, from its having a habit of sometimes twisting itself into such peculiar contortions as to resemble a complicated or Gordian knot. In this state it often continues for a considerable space;
and



London, Published New-Eng. by F. P. Nodder & Co. N^o. 15 Brainer Street.

and then slowly disengages itself, and extends its body at full length. Sometimes it moves in the water with a pretty quick undulating motion like that of a leech; and at other times in the slowest and most languid manner imaginable. Its popular name of Hair-Worm was not given it from its form alone, but from an idea that it was produced from the hair of horses and other animals which had been cast in the water: an opinion which is not even yet extinct amongst the vulgar. A remarkable circumstance relative to this animal is, that its bite, which it sometimes inflicts on being taken out of the water, has been known to produce the complaint called a whitlow. This is mentioned by Linnæus as a popular idea in Sweden, and which had been confirmed by the experience of a person of high reputation. I can also add the testimony of a gentleman of great veracity, who assured me that on having incautiously taken a Gordius out of the water, he was bit by it on the tip of his finger, and that in consequence of the bite a whitlow soon took place. Whether however there be really any thing peculiarly irritating in the bite of this worm, or whether a similar puncture caused by any other means might not produce the same effect, I cannot take upon me to determine.

It would be unpardonable on this subject to omit observing that the complaint called the Guinea-Worm, or Vena Medinenfis, which sometimes happens in the warmer regions, is owing to a species of Gordius, which is said to insinuate itself (probably when very small) under the skin; where it grows to a great length; is productive of very troublesome symptoms, and is extremely difficult to extract. It is remarkable also that a species
of

of Gordius, perhaps the *Gordius aquaticus* in a very young state, occurs not unfrequently in animals in which one would least expect to find it; viz. in beetles of different sorts, in caterpillars, and other insects; and I once discovered in the brain of the smaller Water-Newt (*Lacerta aquatica*. Lin.) a number of microscopic Gordii so extremely minute as not to exceed the thousandth part of an inch in length. The *gordius aquaticus* is very tenacious of life, and after being kept a long time in a vessel of water, will sometimes appear perfectly motionless, and as if dead, for several hours; after which it will again assume its former vigour, and seem as healthy as at first. It should also be observed that the Gordius is not unfrequently found in earth as well as in water; especially in garden-ground after rain; and in clayey soils, in which it moves with great facility.

COLUBER CERASTES.



CHARACTER GENERICUS.

Scuta abdominalia.

Squamæ subcaudales.

Lin. Syst. Nat. p. 275.

CHARACTER SPECIFICUS, &c.

COLUBER cornutus fusco-ferrugineus, scutis abdominalibus 150, squamis subcaudalibus 25.

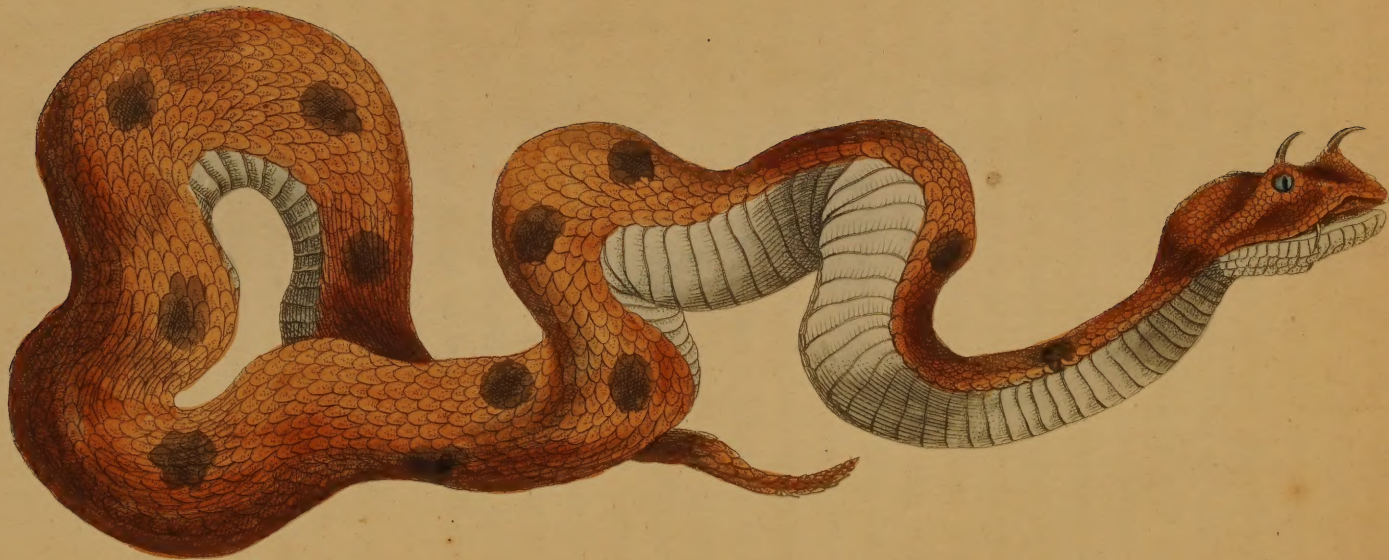
Bellon. it. 203.

Ellis. aët. angl. 56. t. 14.

Coluber Cerastes, longus ut plurimum, pedem seu quindecim uncias, cornubus duobus incurvis supra oculos sitis et antrorsum spectantibus insignis est: quæ licet nequaquam similia sint quadrupedum cornubus, nec vulnus possint vel inferre vel defendere, augment tamen quodammodo odium quod contra totum genus serpentinum plerique solemus concipere, ipsiusque animalis vultum maligniorem et truculentiorem reddunt. In Africa innascitur Cerastes, præcipuamque sibi sedem delegit in desertis siccis et arenosis. In Ægypto? communis est, nec non in certis Nubiæ et Abyssiinæ partibus. In Syria quoque et Arabia plurimus. Ad viperæ vulgaris

vulgaris similitudinem non parum accedit Ceraſtes; ob morſum tamen magis eſt pertimeſcendus, quippe non ſolum eos qui incaute illum proculcant vulnerat, verum etiam magno et repentino impetu in prætereuntes e longinquo inſilit. In multis Africæ regionibus, ſi qua fides peregrinatoribus digniſſimis, ſunt qui hos nec non alios venenatos ſerpentes medicamentis pollentibus hebetatos poſſunt fascinare; quique rite parati nihil ab illis metuunt, omnigena licet provocatione irritentur. Lubenter crederem ſerpentes ita delenitos, telis venenatis, dentibus ſcilicet tubulatis prius fuiſſe privatos, ni Brucio, cui in itineribus Africanis plurimæ oblatae ſunt occaſiones veritatem eruendi, longe alia mens eſſet. “ Audaſter poſſum affirmare me in urbe Cairo vidiffe “ (quod fane alicui in quotidianum datur conſpectum,) “ errantem quendam ab avium conditarum coemeteriis, “ qui nudis manibus Ceraſtem e plurimis in imo dolio “ jacentibus ſublato capiti impoſuit, pileoque com- “ muni rubro cooperuit; poſtea in pectore fovit, et “ quaſi monile circa collum ligavit. Simul ac vero “ gallinæ admoveretur ipſiſſimus hic ſerpens, momordit “ eam, illaque cito periit. Tandem homo, ut ſaſtigi- “ um operi imponeret, ſerpentem collo prehenſum, a “ cauda incipiens ſtatim abſque ullo ſaſtidii ſigno, ac “ ſi quis daucum aut *celeri* devoravit.”

Addit Brucius omnes populos nigros in regno *Sennaar* perfecte hoc modo contra Ceraſtes armari, eoſque non ſolum in pectoribus imponere, ſed cum iis ludere, et in ſeſe timoris et periculi expertes invicem conjicere, uti pueri poma.



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THE
CERASTES,
OR
HORNED VIPER.



GENERIC CHARACTER.

Transverse *Lamellæ* under the abdomen.

Alternate *Scales* under the tail.

SPECIFIC CHARACTER, &c.

FERRUGINOUS-BROWN HORNED VIPER

with about 150 abdominal plates and 25 sub-caudal scales.

THE CERASTES, OR HORNED SNAKE.

The Coluber Ceraſtes, which commonly grows to the length of about a foot or fifteen inches, is diſtinguiſhed by a pair of horns or curved proceſſes, ſeated above the eyes and pointing forwards. Theſe horns have nothing analogous in their ſtructure to the horns of quadrupeds, and are by no means to be conſidered in the light of either offensive or defensive weapons : they increaſe however the natural antipathy ſo generally felt againſt the ſerpent tribe, and give the animal a more
than

than ordinary appearance of malignity. This serpent is a native of Africa, and is principally found in sandy deserts and dry places. In Egypt? it is common, as well as in some particular parts of Nubia and Abyssinia. It also abounds in Syria and Arabia. It bears a very great analogy to the common viper: its bite is perhaps still more to be dreaded, since exclusive of the general danger in treading accidentally on one of these reptiles, and thus irritating it unawares, it possesses a propensity of springing with great suddenness to a considerable distance, and assailing without provocation those who happen to approach it. In many parts of Africa, according to the testimony of the most respectable travellers, there prevails a method of charming, as it were, or stupifying these, as well as other poisonous serpents, by the use of certain preparations of such powerful efficacy as effectually to secure the person so prepared from being in the least bitten by the animals, though oppressed by every species of irritation. A suspicion might naturally arise that the serpents thus treated had been first deprived of their fangs, and consequently of their power of poisoning; but that this is not the case, is expressly declared by Mr. Bruce, who, during his African travels, had ample opportunities of witnessing these extraordinary experiments. On this subject Mr. Bruce expresses himself as follows:

“ I will not hesitate to aver, that I have seen at Cairo
“ (and this may be seen daily, without trouble or ex-
“ pence) a man who came from above the catacombs
“ where the mummy-birds are kept, who has taken a
“ Ceraustes with his naked hand from a number of
“ others lying at the bottom of the tub; has put it
“ upon

“ upon his bare head, covered it with the common red
“ cap he wears, then taken it out, put it in his breast,
“ and tied it about his neck like a necklace; after
“ which it has been applied to a hen, and bit it, which
“ has died in a few minutes : and to complete the ex-
“ periment, the man has taken it by the neck, and
“ beginning at his tail, has ate it, as one would do a
“ carrot, or a stock of celery, without any seeming
“ repugnance.”

Mr. Bruce adds, that all the black people in the kingdom of Sennaar are perfectly armed in this manner against the bite of the Ceraftes, and put them at any time into their bosoms, and throw them at one another as children do apples, with the most perfect impunity.

DIDUS INEPTUS.



CHARACTER GENERICUS.

Rastrum medio coarctatum rugis duabus transversis : utraque mandibula inflexo apice.

Facies ultra oculos nuda.

Lin. Syst. Nat. p. 267.

CHARACTER SPECIFICUS, &c.

DIDUS nigricans albido-nebulosus, pedibus tetradactylis.

DIDUS INEPTUS.

Lin. Syst. Nat. p. 267.

GALLUS gallinaceus peregrinus.

Clus. exot. 99. t. 100.

CYGNUS CUCULLATUS.

Nieremb. nat. 231.

STRUTHIO CUCULLATUS.

Lin. Syst. Nat. X. p. 155.

Si unico vero et genuino exemplari, quod ab ipsa vita delineari dicitur, undeque reliqua fere omnia adumbrata sunt, danda sit fides ; hebetat vultum hujus avis tam plumbea stupiditas, ut nomen inde triviale adepta

F

fit.

fit. Mole saltem æqualis esse dicitur cygno; cujus ab eleganti forma in reliquis longe abhorret. Color generalis niger est; alarum autem pars media, abdomen, et in cauda plumæ aliquot fere albent. Rostri enormis maxilla superior prope apicem macula magna rubente distinguitur, basi seu lata parte longe super frontem retro excurrente, ut facies quasi cucullata videatur. Mirum est, cum scientiæ naturalis studio quotidianum fere nunc dierum fiat incrementum, deesse vel unicum specimen singularis istius avis, quæ, quantum ipse comperi, rarissime in Europam illata est ab anno 1598, quo tempore a parvula Mauritii insula Indica advenisse dicitur. Descripserunt eam plurimi auctores, Nierembergius scilicet, Bontius, Clusiusque inter vetustiores, et e recentioribus Buffonus, Edwardus, Brissonus, aliique. Pene tamen ignosceremus dubitantibus an revera extiterit, ni aliter testarentur Herbertus aliique qui se ipsam in natalibus regionibus suis oculis conspexisse profitentur; ipseque Willoughbeius suum calculum adderet, qui asserit se spolia ejus in museo Joannis Tradescantii vidisse. In Museo Britannico asservatur, quod plurimi auctores imitati sunt, ipsum unde avis depicta est archetypum. Frumento vesci dicitur Didus, et ingenio esse mansueto. Sitne ad edendum utilis varie disputatur. Alii durum et injucundum ducunt; alii contra dignum putant ut mensæ apponatur; pectus præcipue, quod, teste Bontio, tantum est, ut horum tria quatuorve centum convivis sufficiant. Africæ et Indiæ Orientalis insulas inhabitat.

Denique, liceat fortasse nobis conjicere annon *Diomedæ exulantis* Linnæi nondum ætate provectæ infidæ delineationi Didus originem debeat. Quod si concedatur, certe



—London. Published Dec. 24th 1899 by F. P. Nodder & Co. Nos. Brewer Street.

certe manus pictoris nimium nimiumque oblita est veritatis, quæ pedes Diomedæ pinnatos alasque amplissimas et longissimas neglexerit, ut taceam cætera, in quibus hæ aves nullo modo convenire queant. E contrario tamen negari non possit rostrum Diomedæ rostro quod Didi putatur non multum esse dissimile; et si specimen Diomedæ junioris examinemus cui color adhuc imperfectus, cujusque super alas cæterasque partes albedo cum nigredine commiscetur, præsertim si avem torpidam et subsidentem fingimus, quod interdum fit, non omnino impossibile fatebimur quin a falsa aliqua hujusmodi repræsentatione Didus originem duxerit. Charltonus in libro cui titulus *Onomasticon Zoicon*, asserit rostrum cum capite Didi tunc temporis in Museo Regalis Societatis Londinensis fuisse servatum. Quod tamen ille rostrum Didi censuit nihil aliud fortasse fuerit quam Diomedæ rostrum. Res igitur non prorsus caret dubio, et optandum admodum est ut avis ipsa vera et genuina, si modo talis alicubi exstet, laudabili physicorum hodiernorum diligentia in Europam tandem asportetur.



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THE
D O D O.



GENERIC CHARACTER.

Bill large, bending inward in the middle of the upper mandible, marked with two oblique ribs, and much hooked at the end.

Nostrils placed obliquely near the edge, in the middle of the bill.

Legs short, thick, feathered a little below the knees.

Toes three forward, one backward.

Pennant.

SPECIFIC CHARACTER, &c.

BLACKISH DODO, clouded with whitish;
with tetradactylous feet.

THE DODO.

Will. orn. p. 153. pl. 27.

Edw. pl. 294.

DOD-EERSEN, OR VALGH-VOGEL.

Herbert. trav. p. 382. pl. in p. 383.

This bird, if we may depend on the fidelity of the only original figure, (which is said to have been taken from the life, and from which almost all authors have
hitherto

hitherto copied,) is distinguished by an aspect of such confirmed stupidity, as to have obtained the trivial name of *ineptus*. In size it is said at least to equal, if not exceed, a swan, but in shape and general appearance forms a striking contrast to that elegant bird. Its prevailing colour is black, but the middle of the wings, the belly, and some of the tail feathers are white, or nearly so. The beak, which is of a very singular form, and of enormous size, is distinguished near the tip by a large red patch on the upper part; while the base or broad part runs far back over the front, so as to give the face a sort of hooded appearance. It is astonishing that in the present improved state of natural history, we should still be at a loss for a single specimen of this extraordinary bird, which, so far as I am able to discover, has scarce been imported into Europe since the year 1598, nearly at which period it is said to have been brought from the little island of Mauritius in the East Indies. It has been described by several authors, as Nieremberg, Bontius, and Clusius, amongst the older writers, and by the Count de Buffon, Edwards, Brisson, and others amongst the moderns. Were it not, however, for the attestations of Herbert and others, who profess to have seen it in its native regions, together with that of Mr. Willoughby, who assures us that he saw a skin of it in the Museum of Sir John Tradescant, we might be almost inclined to call in question the existence of so singular an animal. The original figure above mentioned, and which has been repeated by so many authors, is preserved in the British Museum. This bird is said to be granivorous and of a gentle nature. With respect to its merit as an article of food,
the

the opinion of authors seems to vary; some representing it as tough and unpleasant, while others consider it as by no means ill adapted for the table; especially the breast, which, according to Bontius, is of such a size that three or four of them are enough for a very large company. It is an inhabitant of Africa and the East-Indian islands.

After all, can it be possible that an Albatross, (*Diomedea exulans* Lin.) not fully grown, and inaccurately represented by a draughtsman, may have given rise to the supposed existence of the Dodo? If this be granted, we must surely admit an uncommon degree of carelessness in the painter, who could thus neglect to express the webs on the feet of the Albatross, as well as to represent the wings extremely large and long, instead of small and short; together with other particulars in which the two birds can by no means be made to agree. Yet, on the other hand, it is undeniable that the general appearance of the beak of an Albatross is not greatly dissimilar to that of the supposed Dodo. And if we contemplate a young or half-grown specimen of the great Albatross, before it has arrived at its proper colour, and while there is a mixture of black and white on the wings and other parts, and to this superadd the heavy and crouching posture in which it sometimes appears, it will perhaps seem not absolutely impossible that an erroneous sketch from such a bird may have been the basis on which the existence of the Dodo has hitherto stood. Charleton in his *Onomasticon Zoicon*, affirms that the bill and head of the Dodo were then in the Museum of the Royal Society. This reputed bill of a Dodo may however have been
nothing

nothing more than that of an Albatross. The subject therefore may be still considered as in some degree doubtful, and it remains to wish that the laudable zeal and spirited exertions of modern naturalists may at length put an end to the uncertainty by importing the real bird into Europe, if it can be found to exist.

PENNATULA ARGENTEA.



CHARACTER GENERICUS.

Flores Hydræ, ad marginem denticulatum pinnarum.

Stirps libera, fubulata, apice pinnata.

Lin. Syst. Nat. p. 1321.

CHARACTER SPECIFICUS, &c.

PENNATULA penniformis lanceolata, stirpe lævi tereti, pinnis creberrimis imbricatis.

PENNATULA lanceolata pennæ facie, stirpe lævi tereti, pinnis creberrimis imbricatis dentatis virgatis.

Soland. et Ellis zooph. p. 67. n. 10.

Inter maximas quæ hætenus notæ sunt Pennatulas habenda est hæc species, nulli cedens pulchritudine: est enim argenteo-alba, utrinque super partes expansas seu penniformes lineis aterrimis eleganter striata. Rarissima est, et maria incolit Indica. Delineata est figura magnitudine naturali ab eximio specimine quod suppeditavit Museum Britannicum.



THE
SILVER SEA-PEN.



GENERIC CHARACTER.

Animal free, or locomotive.

Body (generally) expanding into processes on the upper part.

Processes or branches furnished with rows of tubular denticles.

Polype-head proceeding from each tube.

SPECIFIC CHARACTER, &c.

LANCEOLATE FEATHER-SHAPED PEN-
NATULA, with round smooth stem and
thick-set imbricated pinnules.

SILVER SEA-PEN.

Ellis. and Soland: zooph. p. 66.

t. 8. f. 1. 2. 3.

Of all the Pennatulæ yet known the present is one of the largest as well as the most specious in its appearance; being of a beautiful silvery white, elegantly striated on each of the feather-like processes with lines or streaks

freaks of the deepest black. It is extremely rare, and is a native of the Indian seas. The figure here given is copied from the very fine specimen in the British Museum, and represents the animal in its natural size.

PAPILIO RIPHEUS.



CHARACTER GENERICUS.

Antennæ apicem versus crassiores, sæpius clavato-capitatae.

Alæ sedentis erectæ sursumque conniventes (volatu diurno.)

Lin. Syst. Nat. p. 744.

CHARACTER SPECIFICUS, &c.

PAPILIO alis sexdentato-caudatis nigris viridi fasciatis, posterioribus medio aureo-rubris nigro maculatis.

PALILIO alis sexdentato-caudatis nigris viridi fasciatis, posterioribus subtus macula ani ferruginea nigro punctata.

Gmel. Syst. Nat. p. 2235.

Fabr. mant. inf. 2. p. 6. n. 43.

Cram. pap. 33. t. 385. f. A. B.

Eq. Achiv.

Papilionem in hac tabula depinximus non modo rarissimum, sed etiam coloribus splendissimis omnibus fere sui generis antecellentem. Haud multis abhinc annis in Europa innotuit hæc species in perpaucis museis vel
nunc

nunc conspicienda. Indiæ Orientalis est incola, et in
China præcipue invenitur. Papilioni Leilo Linnæi
valde affinis est tum forma tum coloribus; jactat tamen
majorem elegantiam lautioremque varietatem. Eruca,
hujus papilionis parens adhuc incognita est, verisimile
autem est eam erucæ papilionis Leilii a Domina Merian
inter insecta Surinamensia depictæ non absimilem esse.

R I P H E U S,
OR THE
ORIENTAL EMPEROR.



GENERIC CHARACTER.

The *Antennæ* or *Horns* thickening towards the upper part, and generally terminating in a knob, or club-shaped tip.

The *Wings* (when fitting) erect, and meeting upwards. (*Flight* diurnal.)

SPECIFIC CHARACTER.

BLACK BUTTERFLY fasciated with golden-green; the lower wings marked in the middle with a large patch of golden-red spotted with black, and furnished with six elongated or subcaudated processes.

Cram. pap. 33. t. 385. f. A. B.

Drury. 2. pl. 23. f. 1. 2. ?

We have here represented a *Papilio*, which, exclusive of the extreme rarity of the species, may perhaps be pronounced the most beautiful of that splendid tribe. It is but a few years since this gay insect became known in Europe, and it is at present so rare as to be found in
very

very few collections. It is an East-Indian insect, but is principally found in China. It is very nearly allied both in shape and general disposition of colours to the *Papilio Leilus*; but is still more elegant, and displays a much richer variety of tints. The caterpillar of this butterfly is yet unknown; but it probably bears a near resemblance to that of *Papilio Leilus*, which has been figured amongst the Surinam insects by Madam Merian.

PICUS ERYTHROCEPHALUS.



CHARACTER GENERICUS.

Rostrum polyedrum, rectum : apice cuneato.

Nares pennis fetaceis recumbentibus obtectæ.

Lingua teres, lumbriciformis, longissima, mucronata, apice retrorsum aculeata fetis.

Pedes scanforii.

Lin. Syst. Nat. p. 173.

CHARACTER SPECIFICUS, &c.

PICUS capite toto rubro, alis caudaque nigris, abdomine albo.

Lin. Syst. Nat. p. 174.

PICUS ERYTHROCEPHALUS VIRGINIENSIS.

Briss. av. 4. p. 53. n. 19. t. 3. f. 1.

Notissima est hæc pici species per omnem fere Septentrionalem Americam, habeturque arvis et pomariis inimicissima, zæque et fructibus magnam stragem inferre. Elegans est, si quæ alia, et concinna. Caput collumque lætissime phoenicea. Cætera avis nigrat quasi polita non sine nitore quodam cæruleo ; si excipias pectus, abdomen, uropygium, remigesque secundarios,

cundarios, quæ omnia nivea sunt, scapis eorundem
remigum nigris. Rostrum pedesque saturatim plumbea.
Mas et foemina valde inter se similes: foeminæ tamen
caput minus rubet, immo interdum fere fuscum. Mag-
nitudine prope æqualis est hæc species pico maculato
majori Anglico, qui picus major Linnæi.



N

London. Published Jan. 7th 1793. by F. & J. Nodder & Co

N. 15. Brewer Street.

THE
RED-HEADED WOODPECKER.



GENERIC CHARACTER.

Bill angular, strait, cuneated at the tip.

Nostrils covered with reflected bristly feathers.

Tongue cylindric, worm-shaped, very long, sharp-pointed, and (generally) aculeated at the tip with reflex bristles.

Feet formed for climbing, viz. two toes forward and two backward.

SPECIFIC CHARACTER, &c.

BLACK WOODPECKER with the head and neck crimson; breast, abdomen, and shorter wing-feathers white.

RED-HEADED WOODPECKER.

Catesb. car. 1. pl. 20.

The species of Woodpecker here figured is extremely common in most parts of North America, and is considered as a most destructive enemy to plantations and orchards, devouring great quantities of maize and fruit. It is a bird of singular beauty and neatness of appearance. The head and neck are of the richest crimson: the rest of the bird of a deep polished black, with a blueish

blueish gloss, except the breast, belly, rump, and shorter feathers of the wings, which are snow-white. The shafts of the white wing-feathers are black. The beak and legs are of a deep lead-colour. The male and female greatly resemble each other, but the head of the female is less rich in colour, and sometimes even brownish. The size of this species is nearly that of the greater spotted English Woodpecker, or *Picus Major* of Linnaeus.

RANA ARBOREA.



CHARACTER GENERICUS.

Corpus tetrapodum, nudum, ecaudatum.

Lin. Syst. Nat. p. 354.

CHARACTER SPECIFICUS, &c.

RANA corpore lævi: subtus punctis contiguis tuberculato, pedibus fissis, unguibus orbiculato-dilatatis.

Lin. Syst. Nat. p. 357.

RANUNCULUS VIRIDIS.

Gesn. pisc. 808.

RANA ARBOREA S. RANUNCULUS VIRIDIS.

Raj. quadr. 251.

In Anglia licet ignoretur bella hæc et parvula ranæ species, Galliæ tamen, Germaniæ, multisque Europæis regionibus communis est. Inter arborum folia præcipue versatur, quorum, ut plurimum, paginæ inferiori solet adhærere; pedibus ad hoc ipsum mire formatis, cum scilicet singulus digitus in orbiculum depresso definat; ita ut rana a glabra quavis superficie satis secura

cura possit pendere. Nascitur, ut et reliquum genus,
primo gyrinus : fœminæ enim, ut ova deponant, arbo-
res deferunt, et aquas petunt ; quo tempore mas fac-
cum seu globum magnum e gula protrudit, alias vix et
ne vix visibilem.



THE TREE FROG.



GENERIC CHARACTER.

Body four-footed, naked, tailed.

SPECIFIC CHARACTER, &c.

GREEN FROG, with unwebbed feet and orbicular flattened toes.

THE TREE FROG.

The beautiful little species of frog here represented is not uncommon in many parts of Europe, as France, Germany, &c. but is not found in England. It resides amongst the foliage of trees, and generally adheres to the under side of the leaves, the structure of the feet being finely adapted for this power; each toe terminating in an orbicular flattened process, by means of which the animal can apply itself with perfect security to the smoothest surface. Like others of its genus, it is first produced in the state of a tadpole; the females during the breeding season leaving the trees, and betaking themselves to the water, in order to deposit their spawn. The male during that period has a large inflated gular pouch or globe, which at other times is scarce ever visible.

chritudine, speciem tamen exoticam excipiamus necesse est quam ostendit tabula non tantum magnitudine naturali, sed et microscopio auctam : notas enim gerit hæc non vulgaris splendoris ; maculas scilicet tres in corpore superiori, et interdum plures, colore quodam metallico velut aurato, qui splendor præcipue notabilis, si immersum fuerit insectum in liquore qui vulgo dicitur *spiritus vini*. Color imus fusco-virescens, pallet, punctulis minimis nigris corpori impressis. Abdominis margo levissime crenata serie macularum nigrarum. Caput magna ex parte conformatum est eodem fere modo quo acari columbini, cui in hoc auratus valde videtur affinis ; ope nempe rostri, cujus superficies inferior præcipue ferrata, uncis retro spectantibus, animali quod vexare cupit arctissime adhærens. Summa autem est similitudo inter hanc speciem et Acarum Iguanæ Fabricii, quem memorat ille detectum esse mordicus affixum sacculo gulari Lacertæ Iguanæ Linnæi, quæ postea in spiritu vini asservabatur. Simili modo auratus se affigit Colubro Najæ Linnæi, cujus specimina eodem liquore condita remanent. Verisimile est speciem esse novam, nisi potius varietatem esse Acari Iguanæ de quo jam diximus. Memorat Seba serpentes interdum acaris infestari, sed, quod vitium erat sui temporis, laxè et ambigue loquens, non acaros sed pediculos eos vocat.



S. N.

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THE GOLD-SPOTTED ACARUS.



GENERIC CHARACTER.

Eight *Legs*.

Two *Eyes*, situated on the sides of the head.

Two *Tentacula*, jointed, and shaped like feet.

SPECIFIC CHARACTER.

ORBICULAR FLATTISH ACARUS, with gold-coloured spots; the body marked above by numerous impressed points; the abdomen subcrenated.

The genus *Acarus*, which seems to be diffused throughout all parts of the world, and of which a great many species must doubtless remain still undiscovered, is, in general, distinguished by the extraordinary minuteness of its appearance; several kinds being scarce visible without close inspection, and easily escaping the notice of a common eye. Some species however so far exceed the rest of the genus in size as to be sufficiently conspicuous even at a moderate distance; for instance, the *Acarus Ricinus* or common tick, so frequently seen on dogs; the *Acarus columbarum*, not less plentiful on pigeons and some other animals; and the *Acarus holosericeus* or velvet mite, so remarkable for its bright scarlet colour and downy surface. In general the *Acari* are much more

more distinguished by the singularity than the beauty of their appearance. The very curious exotic species here figured, both in its natural size and magnified by the microscope, is an exception to this general rule, and is adorned with marks of no inconsiderable splendor; the upper part of the body being furnished with three and sometimes more large spots of a golden tinge, accompanied by a metallic lustre. This appearance is however most conspicuous while the animal is immersed in spirits of wine. The general colour of this species is a pale greenish-brown, variegated with minute specks of black, forming so many impressed spots on the surface of the body. The edge of the abdomen is very slightly notched or indented by a row of marks of the same colour. In the general form of the apparatus at the head, this species bears a most striking affinity to the pigeon-tick or *Acarus columbarum*, being furnished like that animal, with a serrated snout, the processes of which lying on the under surface, and pointing backwards, enable it to adhere with great firmness to the skin of the creature it infests. The species to which it bears the greatest resemblance is the *Acarus Iguanæ* of Fabricius, which is by that author commemorated as having been found strongly affixed to the gular pouch of the *Lacerta Iguana* of Linnæus preserved in spirits. The present species is found adhering in the same manner to specimens preserved in spirits of the *Coluber Naja* or Cobra de Capello. It is most probably a new species, unless it should be regarded as a variety of the *A. Iguanæ* of Fabricius. The circumstance of snakes being sometimes infested by Acari is mentioned by Seba, who, in the usual inaccurate style of his time, gives them the title of *Pediculi*.

ALCEDO ISPIDA.



CHARACTER GENERICUS.

Rostrum trigonum, crassum, rectum, longum.

Lingua carnosa, brevissima, plana, acuta.

Pedes gressorii *plerisque*.

Lin. Syst. Nat. p. 178.

CHARACTER SPECIFICUS, &c.

ALCEDO BRACHYURA, supra cyanea, subtus
fulva, loris rufis.

Lin. Syst. Nat. p. 179.

ALCEDO BRACHYURA SUBCRISTATA
CÆRULEA, subtus rufa, loris fulvis, ver-
tice nigro undulato, macula aurium gulaque
albis.

Lath. ind. orn. p. 252.

ALCYON.

Gesn. av. 85.

ISPIDA.

Gesn. av. 571.

Will. orn. 101.

Non modo avium Britannicarum sed et Europæarum
nitidissima est et lautissima Alcedo Ispida, exceptis Lin-
næi Coracia Garrula Meropeque Apiastro, quas neutras
I genuit

genuit Britannia, *hanc* licet advenam ad nos rarissimus casus appulerit. Cum pisciculis vescatur Alcedo, rivos ideo et loca impertubata quærit, solitudinis et silentii cupida; quam ob causam melancholiæ symbolum habetur, exemplumque egregiæ pulchritudinis protervos oculos sedulo evitantis, cuique non male convenit celeberrimi poetæ votum “ Flumina amem sylvasque.”

Turbata motu fertur celerrimo vix ac ne vix horri-
zontem superans, coloremque adeo vividum in transitu ostentat, ut alis papilionis Menelai fere æqualem diceres. Interdum suspensa super aquas alis expansis rapideque vibratis more Nisi conspicitur, fulgores jactans tunc temporis præter solitum splendidos. Inter ripas fluviorum, interdum etiam aquarum stagnantium, in foraminibus alte effossis nidificat, ova deponens quinque, septem, vel etiam novem, Inter marem et feminam fere ambigua est similitudo. Alcedo plerumque vera Halcyon creditur, quam nidum fluitantem construere putabant veteres; qui in hoc fortasse errarunt, quod nidum Colymbi alicujus pro nido Halcyonis habuerint. Colymborum enim certæ species nidos fluitantes e plantis aquaticis revera contexunt, qui juxta riparum aggeres inter arundines laxius siti, super aquas nonnunquam a ripa huc illuc feruntur.



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THE COMMON KINGFISHER.



GENERIC CHARACTER.

Bill trigonal, thick, strait, long, sharp-pointed.

Tongue fleshy, very short, flat, sharp-pointed.

Feet (in most species) gressorial, *i. e.* three toes forward and one backward, and the three lower joints of the middle toe closely jointed to those of the outmost.

SPECIFIC CHARACTER, &c.

SHORT-TAILED KINGFISHER, blue above, fulvous beneath, with rufous lores and white auricular spot.

THE COMMON KINGFISHER.

Lath. Syn. 1. p. 626.

Will. orn. 146.

LE MARTIN-PÊCHEUR.

Buff. ois. 7. p. 164.

Pl. enl. 77.

The *Alcedo Ispida* or common Kingfisher is by far the most brilliant of the British birds: indeed no other bird of Europe can equal it in liveliness of colours ex-

cept the Roller, (*Coracias Garrula*. Lin.) and the Bee-Eater, (*Merops Apiaster*. Lin.) neither of which are natives of Britain, though the former has sometimes been seen as an accidental straggler. The Kingfisher is a bird of a retired and solitary disposition, and as from the nature of its food, (which consists entirely of small fish,) it is most commonly found near streams and unfrequented places, it has therefore been fixed upon as an emblem of melancholy, and an example of dazzling beauty, in a state of voluntary retirement. “*Flumina amem sylvasque*” seems to be its motto, and it is rarely seen except in such situations. If disturbed, it darts along in a rapid horizontal motion, and displays a transitory glance of colour which is almost equal in lustre to the wings of the *Papilio Menelaus*. Sometimes it may be seen suspended over the stream in the manner of a hawk, and rapidly vibrating its expanded wings, when its colour is still more beautifully conspicuous. The Kingfisher builds in deep holes in the banks of rivers, and sometimes of stagnant waters. It lays from five to seven or even nine eggs. The male and female bear an extreme resemblance to each other. The Kingfisher is generally supposed to be the true *Halcyon* of the ancients, which was believed to build a floating nest. In order to account for this erroneous idea, we need only suppose that the nests of some of the *Colymbi* or Grebes were mistaken for those of the *Halcyon*: some of the *Colymbi* do really build floating nests of aquatic plants, &c., which though placed amongst the reeds contiguous to the banks, are yet so loose as occasionally to be carried to some little distance on the surface of the water.

GYMNOTUS ELECTRICUS.



CHARACTER GENERICUS.

Caput operculis lateralibus.

Tentacula duo ad labium superius.

Oculi cute communi tecti.

Membrana Branchioftega radiis quinque.

Corpus compressum, subtus pinna carinatum.

Lin. Syst. Nat. p. 144.

CHARACTER SPECIFICUS, &c.

GYMNOTUS NUDUS, dorso apterygio, pinna
caudali obtusissima anali annexa.

Lin. Syst. Nat. p. 144.

GYMNOTUS CAUDA TRUNCATA, maxilla
inferiore longiore.

Gron. zooph. 168.

GYMNOTUS NIGRICANS, cauda curta obtusa,

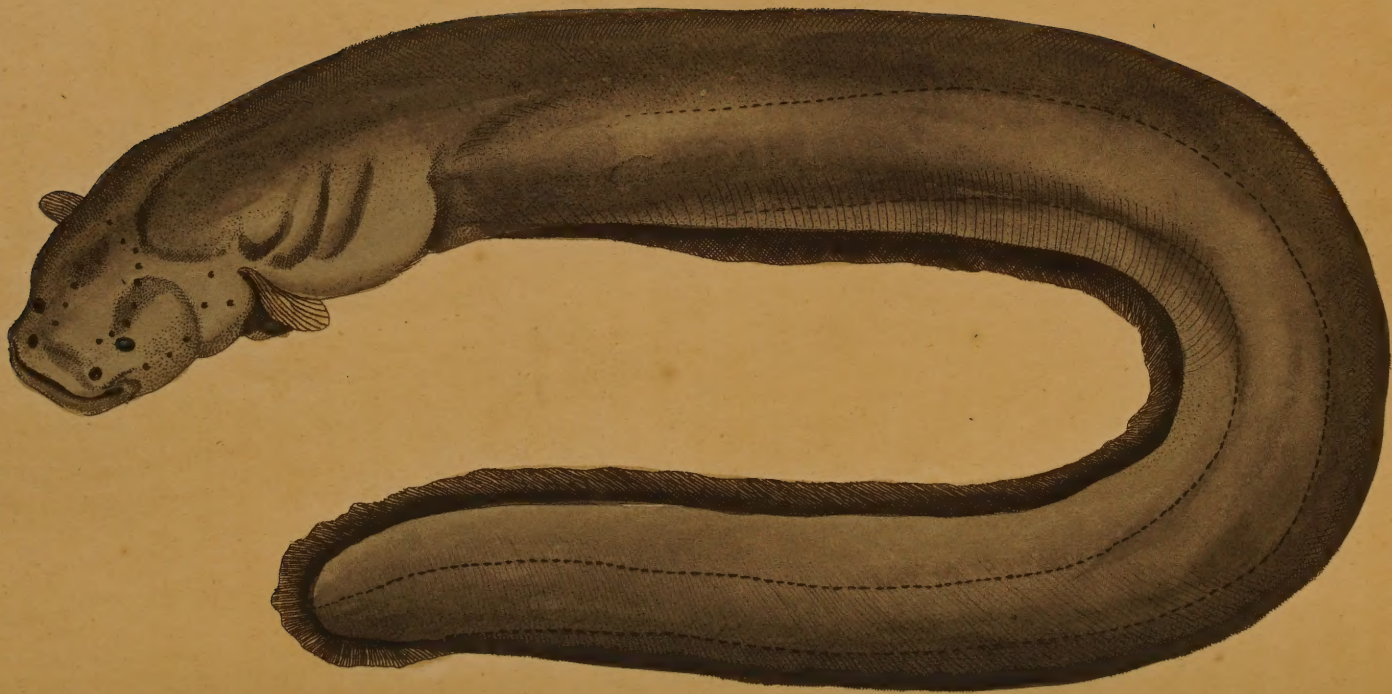
Seb. mus. 3. p. 108. t. 34. f. 6.

Bloch. austr. Fisch. 2. p. 43. t. 156.

Vim illam electricam quam pro arbitrio emittere potest Torpedo, quamque illi procul-dubio ad repellendas injurias dedit Natura, admirati sunt antiqui simul ac recentior

recentiores physici. Taeta Torpedine, ictum illico violentum sentit hostis, probaturque ab experimentis, iisque præcipue Domini Walsli in Actis Anglicis, hunc ictum vere et omnino esse electricum, nullo modo diversum ab illo qui a machina deducitur; posseque cum plurimis, si conjunctæ sint manus, eodem temporis puncto communicari. Piscis vero quem nunc describere pergitur, vel ipsam Torpedinem vi sua electrica longe antecellit: quos enim in fluviis suis natalibus sanus valensque tetigerit, non solum motu sensuque per breve aliquod tempus privat; sed fertur insuper illos qui parum fauste in iisdem aquis nataverint, ab immodico ejus impetu subito percitos interdum periisse. Mira hac facultate vitam sustentat Gymnotus; piscesque, seu alia animalia prope ludentia quæ tactu suo obtorpuerit, corripit statim devoratque tyrannus ille quarum electricus. Paucis abhinc annis viva horum piscium specimina in Angliam illata sunt, et Londini aliisque locis publice spectabantur. Vultu est Gymnotus tetrico et injucundo, primoque intuitu anguillam magnam quodammodo repræsentat, Corpus suum vel contrahere potest vel producere; fibras nempe aliquot musculosas constringendo seu remittendo. Colore nigricat. Caput illi est crassum, corpore paulo latius, depressoque, seu complanatum. Oculi valde exigui; Os magnum: utrisque maxillis insunt dentes parvi, acuti, numerosissimi. Circa caput, præcipue sinciput, varia sunt foramina. Totum animal muco lubrico, muco anguillæ non absimili tegitur. Squamæ illi visibiles nullæ sunt; detegi tamen fortasse possent, si cutis exsiccata et expansa esset, more cutis anguillæ. Alii sunt hujus generis pisces, qui tamen Gymnoto electrico adeo sunt absimiles ut, excepto charactere

charactere generico, cum illo nequaquam convenient,
omnique vi electrica penitus carent. Americam Auf-
tralem incolit Gymnotus electricus, præcipue autem in
Rivo Surinam in Guiana invenitur.



THE ELECTRICAL GYMNOTUS.



GENERIC CHARACTER.

Head furnished with lateral opercula.

Two Tentacula at the upper lip.

Eyes covered by a skin.

Branchiostegous Membrane with five rays.

Body compressed, and carinated by a fin beneath.

SPECIFIC CHARACTER, &c.

BLACKISH GYMNOTUS, without dorsal fin ;
the caudal fin extremely obtuse and jointed
to the anal one.

THE ELECTRICAL EEL.

The power with which Nature has armed the Torpedo, is such as to have rendered it the wonder of the ancient as well as the modern world. This power consists in a natural electricity, which is exerted at the pleasure of the animal, in such a manner as to preserve it in great measure secure from all attacks of other creatures; since no sooner is it touched than a very strong electric shock is instantly felt by the invader.

That

That it is a real electric shock, not differing from that which is received from an electrical machine, has been clearly proved by repeated experiments; particularly by those of Mr. Walsh, related in the Philosophical Transactions; from which it appears that the shock is communicated at the same instant to a number of persons joining hands. The fish however which we now proceed to describe, is possessed of a much greater share of natural electricity than the Torpedo: so powerful is the shock which this fish, in its native rivers, and in full vigour, is capable of inflicting, that it is said to deprive almost entirely of sense and motion for some minutes, such as are exposed to its approach, and that, in consequence of this violent exertion of its electricity, it has sometimes proved fatal to such as have incautiously ventured to swim in the same water. It is by the power of electricity that the *Gymnotus* supports its existence: whatever smaller fish or other animals happen to approach it are instantly stupefied, and fall an easy prey to the electrical tyrant.

Some years ago some of these curious fish were brought alive from Surinam into this kingdom, and were publickly exhibited at London and elsewhere. It is a fish of a disagreeable appearance, and on a cursory view is not much unlike a large eel. Its colour is blackish, and it has a power of shortening at pleasure the length of its body, by the contraction of its muscular fibres, and again relaxing and extending itself to its former length. The head is short, somewhat broader than the body, and a little depressed or flattened: the eyes are very small; the mouth large, and both jaws are furnished with a great many very small sharp teeth.

About

About the head, especially on the fore-part, several foramina or pores appear. The whole animal is coated with a sort of mucus, not unlike that of an eel. The *Gymnotus* is destitute of apparent scales; but the probability is that in a dried skin prepared in the manner of an eel-skin the scales might be found.

There are some other species of *Gymnoti*, which differ very much in their appearance from this: they have no electric power, and are only approximated to this species by their generic character.

The *Gymnotus electricus* is a native of South America, and is principally found in the river Surinam in the province Guiana.

SCARABÆUS MIDAS.



CHARACTER GENERICUS.

Antennæ clavatæ capitulo fissili.

Tibiæ anticæ sæpius dentatæ.

Lin. Syst. Nat. p. 541.

CHARACTER SPECIFICUS, &c.

SCARABÆUS exscutellatus, thorace tricorni,
clypeo sinuato bicorni.

Fab. Syst. Ent. p. 21.

—— *Spec. inf.* p. 24.

Gmel. Syst. Nat. p. 1534.

Varium adeo et multiforme est totum scarabæorum genus, cornuum partiumque prominentiorum tanta est et fere incredibilis diversitas, ut in iis generandis pene luisse naturam putemus. Quod si majoribus animalibus mole æquales essent scarabæi, ipsa poetarum et pictorum monstra, quibus quælibet audendi fingendique potestas, a revera existentibus vincerentur. Aliis caput tantum cornutum est, aliis tantum thorax, aliis tum caput tum thorax. Inter rarissimas vero simul ac maxime singulares species eminet scarabæus iste in tabula, qui Americam incolit; præcipue Australem? Color est aterrimus :

mus: corporis inferiora, præsertim versus pectus et inflectiones crurum tomento obscure ferrugineo vestiuntur. Elytra seu alarum thecæ exteriores striis paucis longitudinalibus notantur. Perpulchrum rari hujus insecti specimen in Museo Leveriano conspicitur.



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THE MIDAS BEETLE.



GENERIC CHARACTER.

Antennæ divided at the tip or head into several lamellæ.

Tibiæ, or second joints of the fore-legs generally toothed.

SPECIFIC CHARACTER.

NON-SCUTELLATED BEETLE, with broad treble-horned thorax and double horned sinuated clypeus.

In the beetle tribe we are presented with a wonderful, and, as it were, almost capricious diversity of form. Every variation of horn and process that imagination can conceive being exemplified in the different species of this extensive genus; and if their size approached to that of the larger animals, even the monsters of romance would be exceeded by the realities of nature. In some the head alone is horned, in others the thorax only; and in others both head and thorax are furnished with these appendages. Amongst the rarest, as well as the most singular species, may be reckoned the beetle
here

here represented, which is a native of America, and particularly of South America? Its colour is a deep black; but the under parts, especially toward the breast and the insertions of the legs, are coated with a dark ferruginous down. The Elytra or wing-sheaths are marked by a few longitudinal striæ. A very fine specimen of this rare insect is to be found in the Leverian Museum.

PSITTACUS MELANOPTERUS.



CHARACTER GENERICUS.

Rostrum aduncum: mandibula superiore mobili;
cera instructa.

Nares in rostri basi.

Lingua carnosa, obtusa, integra.

Pedes scanforii.

CHARACTER SPECIFICUS, &c.

PSITTACUS pallide viridis, dorso alisque nigris,
remigibus secundariis luteis apice cæruleis,
rectricibus purpureis fascia nigra.

Lath. ind. orn. p. 132.

PSITTACUS pallide viridis, dorso, tectricibus
alarum, caudæ fascia remigibusque primariis
nigris, secundariis flavescens cæruleo-
punctatis.

Gmel. Syst. Nat. p. 350.

Psittacus Melanopterus, coloribus elegantissimis uber-
rime ornatus, insulam Javam inhabitat, in Batavia præ-
cipue conspectus. In tabula exprimitur avis magnitu-
dine prope naturali. In museis rarissima est hæc species.
Specimen ipsissimum, unde hæc nostra figura depicta
est, in Museo Britannico asservatur.

THE
BLACK-WINGED PARRAKEET.



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.

Nostrils round, placed in the base of the bill.

Tongue fleshy, broad, blunt at the end.

Legs short. Toes formed for climbing, viz. two forward and two backward.

SPECIFIC CHARACTER, &c.

PALE-GREEN PARRAKEET, with black back and wings; the secondary wing-feathers yellow tipped with blue; the tail lilac-coloured and crossed by a black bar.

PERRUCHE à ailes variées.

Buff. 6. p. 172.

PETITE PERRUCHE de Batavia.

Pl. enl. 791. f. 1.

The *Psittacus melanopterus*, so remarkable for the elegance of its colours, is a native of the island of Java, and is found at Batavia. The plate represents it nearly of its natural size. It is a species very rarely seen in collections. The beautiful specimen from which this figure was executed is in the British Museum.



N

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BALÆNA MYSTICETUS.



CHARACTER GENERICUS.

Dentium loco in maxilla superiore laminæ corneæ.

Fistula duplex.

Lin. Syst. Nat. p. 105.

CHARACTER SPECIFICUS, &c.

BALÆNA naribus flexuosis in medio capite, dorso impinni.

Lin. Syst. Nat. p. 105.

BALÆNA dorso impinni, fistula in medio capite, dorso caudam versus carinato.

Gron. zooph. 139.

BALÆNA vulgaris edentula, dorso non pinnato.

Raj. pisc. p. 16. & 6.

BALÆNA vera Rondeletii, et Balæna Rondeletii, Gesneri et aliorum.

Will. pisc. p. 38. 35.

Licet ob formæ externæ similitudinem et vitam æquoream videatur fortasse inter pisces et animalia cetaria commune esse quoddam cognationis vinculum, revera tamen *mammalia aquatica* habenda sunt. Utcun-

que enim corporis figura, quodque pedibus carere putentur, a reliquis quadrupedibus primo visu longe discrepent, sunt tamen iis revera pedes, quamvis non extrinsecus visibiles; cum habeant pinnae duae anteriores ossa iis analogâ quibus instruuntur pedes antici cæterorum quadrupedum, quibus vero postici, ea contineant duae posteriores, quæ in cauda quasi coadunatae pinnam unicam horizontalem videntur efficere. Similis quoque est partium internarum conformatio ac in aliis mammalibus, pulmonum scilicet, intestinorum, &c. Teper præterea sanguis, ut in illis, feminæque pullos lacte alunt. Tanta est in omnibus cetariis characterum generalium similitudo, ut in uno genere fere reponi possent. Ut vero species facilius dignoscerentur, Linnæo et omnibus fere physicis recentioribus placuit illa in quatuor genera dividere, quæ notis secundariis, situ nempe dentium, fistularum in capite, aliisque signis distinguuntur, quæ vocantur *Monodon*, *Balæna*, *Phyfeter*, *Dolphinus*. Horum in præcipuis Balæna et Phyfetera continentur species maximæ. Omnium princeps est Balæna *Myfticetus*, quo sane majus monstrum nec mare nec tellus generat, ni verum sit quod de Krakene narratur. Antequam numerum redegisset balænarum, quem jam optime callent septentrionales populi, capiendi modus, conspecti sæpius sunt *Myfticeti* longitudine centum pedum. Raro nunc dierum videntur qui pedes sexaginta superant. *Myfticeto* vix excogitari possit aliud animal rudius et informius. Constat enim fere tertia pars e capite. Os monstrose amplum. Lingua interdum pedes octodecim seu viginti longa. Oculi pro corpore minutissimi. In maxilla superiore sitæ sunt numerosissimæ laminæ corneæ serie æquali dispositæ, quæ vulgo *os cetaceum*

cetaceum vocantur. Per fistulam, quæ duplex in summo capite, quasi columnam aquæ in altum assurgentem incredibili vi eructat. Color communis est livide albedo-cinereus, dorso pinnisque obscurioribus et fere subnigricantibus. Variat autem ut et alia pleraque animalia, colore plus minusve saturato. Habitat ut plurimum, in maribus septentrionalibus, ibique arte omnigena in ejus perniciem conspiratur: in merce enim est oleum cetarium. Vicinat præcipue Medusis, Sepiis, aliisque ejusmodi.

Dolendum est poetas, utcunque legentium animos suavitatem delectent, et percellant sublimitate, in describendis iis quæ ad historiam naturalem spectant epitheta adeo inscite feligere, ut ipsam rei de qua canunt imaginem sæpius a vero detorqueant. Hoc nullibi manifestius quam in descriptione illa, grandi certe et magnifica, quæ apud Miltonum legitur balænæ dormientis, cui tamen adjungitur epitheton falsum omnino et incongruum.

“ horrida ponti
Bellua, quæ fluctus inter mirabile Monstrum
Navigat, æquoreæque exultat maxima gentis.
Olim hæc noctivagæ rectori visa biremis,
Norvegiæ falis in spuma dum forte quiescit,
(Sic perhibent nautæ) vasta insula creditur, amplo
Immensum porrecta sinu; latus anchora prensat
Squamosum, et tuta fruitur statione Magister,
Dum pontum obvelant tenebræ, luxque alma moratur.”
Parad. amiss. lat. reddit. a DOBSON.

Nulli autem in toto genere contingunt squamæ. At si forte me putet aliquis hypercriticum, et voluisse Miltonum balænam non vere squamiferam, sed superficiem tantum

tantum habentem rudem et scabrosam, qualis scilicet est cortex arboris, huic opinioni invitus assentiar: quod enim illum in errorem duxerit non e longinquo petendum, figura nempe in Gesneri operibus, quæ pravissime efficta quasi magnis squamis vestita videtur, cuique præterea inscribitur “ Nautæ in dorso Cetorum, quæ insulas putant, anchoras figentes, sæpe periclitantur.” Vix possit dubitari quin poeta nostras celeberrimus, qui multifaria imbutus scientia, librorum quasi gurgēs erat et helluo, Gesneri scriptis, grandi tunc temporis scientiæ naturalis thesauro, optime esset versatus, quodque balæna imago quam ibi viderat altius in animo inhæserat.



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THE
MYSTICETUS,
OR
GREAT NORTHERN WHALE.



GENERIC CHARACTER.

No *Teeth*, instead of which are situated horny
laminæ in the upper jaw.

A double *Fistula* or spiracle on the top of the head.

SPECIFIC CHARACTER, &c.

TOOTHLESS WHALE, blackish above, white
below, without dorsal fin.

THE COMMON OR GREENLAND WHALE.

THE COMMON WHALE.

Pennant. Arct. Zool. sup. 101. n. 5.

THE WHALEBONE WHALE.

Phil. transf. abr. 7. p. 424.

The cetaceous animals, however nearly approximated
to fishes by external form and residence in the waters,
are in reality to be considered as aquatic quadrupeds:
for though from their general shape and seeming want
of

of feet they appear at first view widely removed from the rest of the Mammalia, yet these parts really exist, though not outwardly visible; the two anterior fins being furnished with bones like the feet of other quadrupeds, and the two posterior ones (which from their situation, appear to form but one horizontal caudal fin,) containing the analogous bones of the two hind feet. All the internal parts of this tribe of animals are likewise formed on the same plan as in other Mammalia: having similar lungs, intestines, &c. They have also warm blood, and the females, like other quadrupeds, suckle their young. The general characters of all the Cetacea are so similar, that, in an enlarged view, they might all form one great genus; but as this perhaps would not facilitate the distinction of the several species, Linnæus and most other modern naturalists have agreed in dividing the cetaceous animals into different genera, distinguished by secondary characters, as the situation of the teeth and of the spouting-hole or fistula on the head. This distribution admits of four distinct genera, viz. *Monodon*, *Balæna*, *Phyfeter*, *Delphinus*. Of these the genera of *Balæna* and *Phyfeter* are the two principal, and contain the largest animals. The *Balæna Mysticetus*, or great northern Whale, is as it were the chief of the whole tribe, and (unless the Kraken be not a fabulous existence,) is the largest of all known animals either of land or sea. Before the northern whale-fisheries had reduced the number of this species, it was no very uncommon circumstance to find specimens of an hundred feet in length. These are now rarely seen, and it is not often that they are found of more than sixty feet.

In

In its general shape and appearance this animal is peculiarly uncouth; the head constituting nearly a third of the whole mass. The mouth is of prodigious amplitude; the tongue sometimes measuring eighteen or twenty feet in length. The eyes most disproportionably small. In the upper jaw is a vast number of very long horny laminæ disposed in regular series: these are popularly known by the name of whale-bone. On the top of the head is a double fistula or spout-hole, through which the enormous animal discharges the water at intervals, causing the appearance of a marine jet d'eau ascending to a great height in the air. The general colour of this species is a pale whitish ash, deeper on the back and fins, (where indeed it is nearly blackish.) Like most other animals, however, it varies in intensity of colour. Its general residence is in the northern seas, where it has long constituted the principal trade of the whale or oil fishery. Its food consists chiefly of different species of Sepiæ, Medusæ, &c.

It is to be lamented that in the poetical descriptions of various striking scenes in natural history, the epithets by which many objects are distinguished are, for want of due knowledge of the subject, improperly chosen, and utterly inconsonant with the character of the things intended; by which means the description, however beautiful in point of language, fails in point of accuracy. This is no where more strikingly illustrated than in the august lines of Milton, in which the description of a sleeping whale is injured by an epithet of all others the least according with the nature of the animal.

“ that sea-beast
Leviathan, which God of all his works

Created

Created hugest that swim th' ocean stream :
Him, haply slumb'ring on the Norway foam,
The pilot of some small night-founder'd skiff
Deeming some island, oft, as seamen tell,
With fixed anchor in his scaly rind,
Moors by his side under the lee, while night
Invests the sea, and wished morn delays."

None of the cetaceous tribe are furnished with scales, or any thing analogous to them. It must be acknowledged however that this observation may appear in no small degree hypercritical, and that Milton by the expression of *scaly rind* might only mean rough or scaly in the same sense that those epithets are applied to the bark of a tree, or any irregular surface. There can be little doubt however that real and proper scales were intended by the poet; nor is it difficult to discover the particular circumstance which impressed Milton with this erroneous idea, viz. a figure in the works of Gesner, so injudiciously expressed as to appear on a cursory view as if coated with large scales, with a vessel near it with harpooners, &c. over which is the observation of sailors often mistaking a whale for an island, and thus endangering themselves by attempting to anchor on it. As the general learning and extensive reading of our great poet are so well known, it can hardly be doubted that he was conversant with the writings of Gesner, whose work was then the great depository of natural knowledge, and that the figure and description there given left a lasting impression on his mind.

CERAMBYX LONGIMANUS.



CHARACTER GENERICUS.

Antennæ attenuatæ.

Thorax spinosus aut gibbus.

Elytra linearia.

Lin. Syst. Nat. p. 621.

CHARACTER SPECIFICUS, &c.

CERAMBYX thorace spinis mobilibus, elytris
basi unidentatis apiceque bidentatis, antennis
longis.

Lin. Syst. Nat. p. 621.

SCARABÆUS CAPRICORNUS maximus ni-
gricans, fasciis elytrorum coccineis et flavis.

Sloan. jam. 2. p. 209.

Merian Surin. t. 28.

Aubent. Pl. Enl. 64. f. 1.

Cum ad genus *Cerambyx*, quo nescio an ullum aliud
contineant Coleoptera mirabilius, numerosissimæ refe-
rantur species; perpaucæ tamen sunt quæ longimanum
vel magnitudine vel colorum pulchritudine possunt su-
perare. In tabula depingitur hoc insectum magnitudine
naturali. Americæ Australis est incola. Elytrorum
color

color primarius est fuscus, seu potius nigricans, striis maculisque subflavis et aurantiis, et in nonnullis specimenibus, subrubris interstinctus. Caput etiam cum thorace simili modo variatur; cruraque eodem colore fasciata. Elytrorum superficies propius inspecta villo seu tomento brevissimo vestitur. Speciem hanc præcipue distinguunt crura antica ultra solitum producta; quæ tamen longiora sunt mari quam feminæ. Cerambyces, ut et alia Coleoptera, ab ovis oriuntur, larvarumque mutationes subeunt, quæ plerumque albo-flavescent, et in putridis arborum truncis potissimum degunt.





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THE
LONG-LEGGED CERAMBYX.



GENERIC CHARACTER.

Antennæ attenuated.

Thorax either spinous or gibbous.

Elytra linear.

SPECIFIC CHARACTER, &c.

BLACKISH CERAMBYX with elytra fasciated
with red and yellow, with very long fore-
legs and antennæ.

NOCOONACA.

Grew. mus. p. 163. t. 13.

L'ARLEQUIN DE CAYENNE.

Pl. enl. 64. f. 1.

The genus *Cerambyx*, one of the most curious in the whole tribe of coleopterous insects, contains a prodigious number of species; many of which are extremely remarkable for the singularity of their appearance. There are however few which can exceed in this respect the species here represented, which is also one of the largest of the genus, and is highly distinguished
by

by the beauty of its colours. The figure shews it of its natural size. It is a native of South America: the ground-colour of the elytra or wing-cases is a brownish black, varied with streaks and markings of pale yellow and orange, which in some specimens approaches to red. The head and thorax of the insect are also marked in the same manner, and the legs are crossed by a band of the same colours. The surface of the wing-cases, when narrowly viewed, is of a velvety appearance, or coated with a fine upright villus. This species is principally distinguished by the great length of the fore-legs, which are still longer in the male insect than the female. The Cerambyces, like other insects of the beetle-tribe, proceed from eggs, and pass through the state of larvæ, which are generally of a yellowish white colour, and principally reside in the decayed parts of trees.

AMPELIS GARRULUS.



CHARACTER GENERICUS.

Rostrum rectum, convexum: Mandibula superiore longiore, subincurvata, utrinque emarginata.

Lingua acuta, cartilaginea, bifida.

Lin. Syst. Nat. p. 297.

CHARACTER SPECIFICUS, &c.

AMPELIS occipite cristato, remigibus secundariis
apice membranaceo colorato.

Lin. Syst. Nat. p. 297.

GARRULUS BOHEMICUS.

Gesn. av. 703.

Will. orn. 90. t. 20.

LANIUS GARRULUS.

Fn. Suec. 2. n. 82.

Frequens licet reperiatur bella hæc avis in variis Europæ temperationis partibus, nos non nisi fortuita advena invisit, idque præcipue si hyems fuerit frigidior. Ingenio est vivido admodum alacrique, et ut taceam inusitatam formæ elegantiam, nota sibi fere peculiari distinguitur, cui simile vix in alia ave Europæa possit observari.

observari, remigum nempe fecundariorum appendicibus, quæ corneæ, planæ, oblongæ, lucidæ, et ruberrimæ. Colores feminæ languidiores. Magnitudine alaudam communem paulo superat Ampelis Garrulus, et fructibus baccisque præcipue vescitur.



London, Published April 1843, by T. P. Nodder & Co. No. 15 Brewer Street

THE
BOHEMIAN CHATTERER.



GENERIC CHARACTER.

Bill strait, a little convex above, and bending towards the point; near the end of the upper mandible a small notch on each side.

Nostrils hid in bristles.

Middle Toe closely connected at the base to the outmost.

Pennant.

SPECIFIC CHARACTER, &c.

CRESTED CHATTERER, with the secondary wing-feathers tipped by horny red appendages.

THE BOHEMIAN CHATTERER.

Will. orn. p. 132. pl. 20.

THE SILK-TAIL.

Ray. Syn. p. 85. A.

THE WAXEN CHATTERER.

Br. Zool. No. 112. pl. 48.

This beautiful bird, though common in many of the temperate parts of Europe, is but an occasional visitor in our own country, into which it sometimes mi-

grates, particularly during a severe winter. It is of a most lively and active disposition, and is distinguished, exclusive of the general elegance of its form, by a particularity scarce to be observed in any other European bird, viz. the extraordinary formation of the shorter or secondary wing-feathers, which are tipped by oblong, flat, horny appendages of a lucid surface and of a bright vermilion-colour. The colours of the female are less brilliant than those of the male. Its size is somewhat larger than that of a lark. This species feeds principally on fruits and berries.

L I M A X A T E R.



CHARACTER GENERICUS.

Corpus oblongum, repens; supra clypeo carnosio;
subtus Disco longitudinali plano.

Foramen laterale dextrum pro genitalibus et excrementis.

Tentacula quatuor, supra os.

Lin. Syst. Nat. p. 1081.

CHARACTER SPECIFICUS, &c.

LIMAX ATERRIMUS subtus pallidus.

LIMAX ATER.

List. Angl. 131.

LIMAX tota nigra.

Aldr. inf. 702.

COCHLEA NUDA 3 tota nigra.

Gesn. aquat. 254.

LIMAX ATER.

Lin. Syst. Nat. p. 1081.

L I M A X M A X I M U S.



CHARACTER SPECIFICUS, &c.

LIMAX CINEREUS atro maculatus.

LIMAX MAXIMUS cinereus striatus.

List. anat. t. 3. f. 6—10.

LIMAX MAXIMUS.

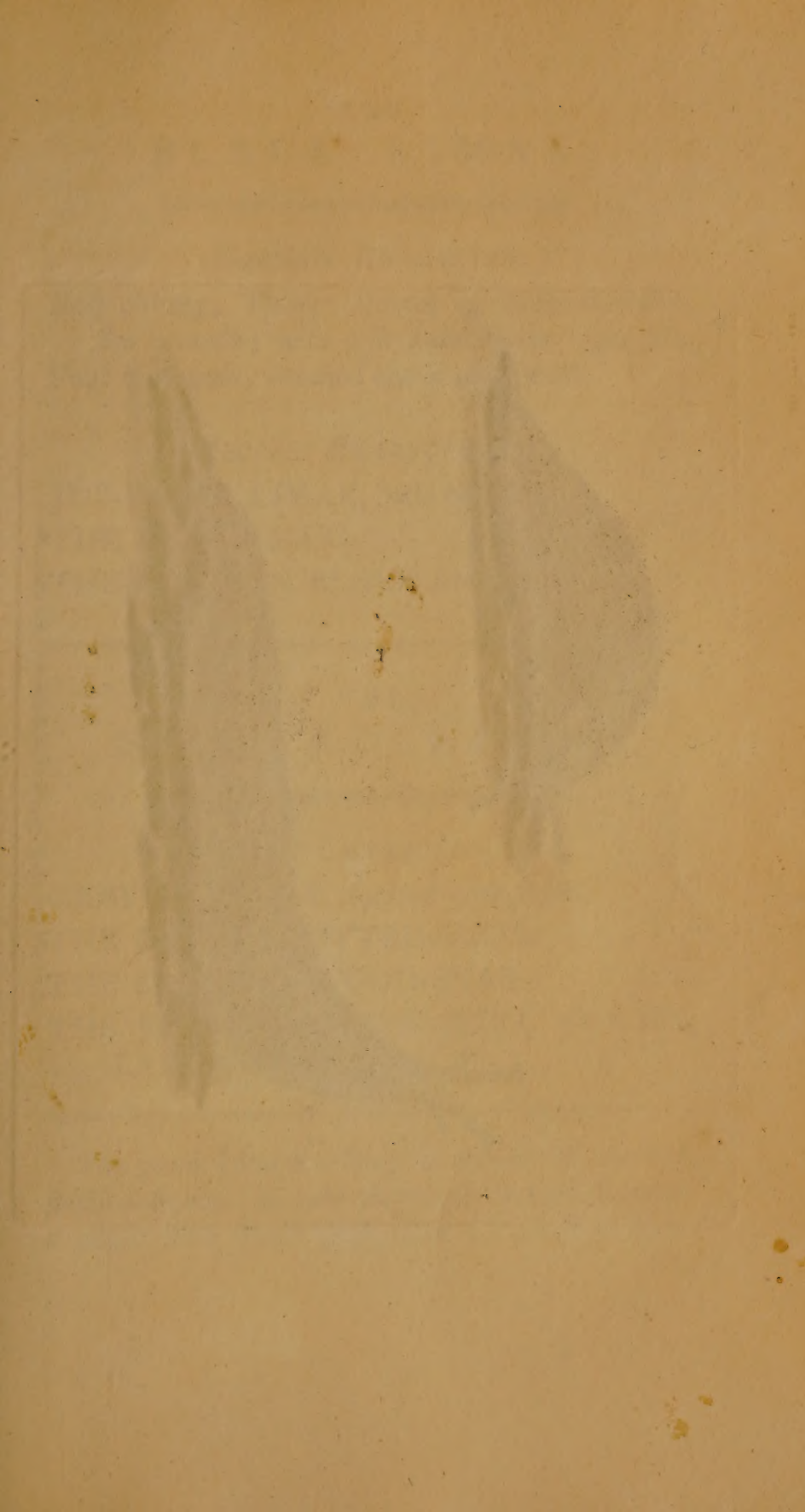
Lin. Syst. Nat. p. 1081.

LIMAX CINEREUS. β .

Gmel. Syst. Nat. p. 3100.

Nudum

Nudum est genus *Limax* caretque testa. De hoc differere supervacaneum fortasse nonnullis videatur, quippe quod vulgatissimum non possit ignorari. Dignissimum tamen est genus quod speciatim describatur, cum exstet exemplum generale seu archetypum unde omnes fere testarum univalvium incolæ formantur; quorum nonnulli adeo *Limaci* similes, ut primo visu in hoc tantum differre videantur quod se ad libitum intra testam possint subducere. Exemplo sit genus *Helix* dictum, in quo nempe continentur *Helices* vulgares testaceæ. Quinimo reliquæ univalves (exceptis paucis quæ insigniter discrepant) ad genus *Limax* plus minus appropinquant. Specierum Britannicarum notiores sunt *Limax ater*, et *Limax maximus*: quorum prior aterimo colore facillime distinguitur, in pratis et pascuis sæpissime repertus; alter rarior, fusco-pallens, non sine maculis striisque inæqualibus nigerrimis, in sylvis præcipue conspicitur, nec raro in hortis vere et autumnis: in domos etiam irrepit. Convenit utrisque de victu, foliis scilicet et radicibus plantarum. *Limax maculatus*, (ut et alii nonnulli,) acaris minimis super corpus turmatim discurrentibus, et in ipsum etiam foramen laterale thoracis irrepentibus sæpissime solet infestari. Vetat tamen torpidum ingenium, aut mucus quo obducitur corpus, ut signa det molestiæ et perturbationis, vel exeuntibus acaris, vel intrantibus.





London, Published April 1st 1793. by F. & C. Nodder & Co. N^o. 15. Bowser Street.

THE
BLACK LIMAX.



GENERIC CHARACTER.

Body oblong; Thorax convex or shielded above,
flat beneath; with a *Foramen* on the right side.
Four *Tentacula*, situated above the mouth.

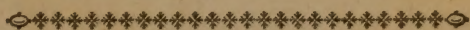
SPECIFIC CHARACTER, &c.

JET-BLACK LIMAX, pale beneath.

THE BLACK SLUG.

THE COMMON BLACK SNAIL.

THE
SPOTTED LIMAX.



SPECIFIC CHARACTER, &c.

GREYISH LIMAX, spotted with black.

THE GREAT SPOTTED SLUG.

THE SPOTTED WOOD-SNAIL.

THE SPOTTED HOUSE-SLUG, OR CEL-
LAR-SNAIL.

The genus *Limax* or Slug, consists of the naked or
shell-less Snails. As these animals are so very common,
it might seem almost unnecessary to introduce them
into

into a work like the present. The genus however is in reality of very great importance, since it stands, as it were, the general archetype or pattern on which the animals of almost all the univalve shells are formed: indeed so very nearly are some of them allied to this genus, that they seem, on a cursory view, to differ in scarce any other circumstance than that of being furnished with shells, into which they can at pleasure withdraw themselves. Of this the genus *Helix*, which contains the common or shell-snails, is a convincing proof. The rest of the univalves, (with a few remarkable exceptions,) are more or less similar to the genus *Limax*. Two of the most familiar species of *Limax* which this country produces are the *Limax ater* and *maximus*: the one is distinguished by its intense blackness, and is extremely common in fields and meadows; the other, less common than the former, is of a pale brown, with irregular deep-black spots and streaks: it is principally seen in woods and in garden-ground during the vernal and autumnal seasons, and not unfrequently creeps into houses. Both agree in their mode of living; feeding on the leaves and roots of vegetables. The spotted Slug, like some others of its genus, is often infested by a very small species of *acarus*, which appears in great numbers, running with much celerity over the animal, and frequently entering the lateral foramen of the body. The *Limax* however, either from its natural hebetude, or from being coated at all times by a quantity of mucus, seems to feel no particular inconvenience from these little insects, and shews no symptoms of irritation even when they are running in and out of the orifice in its side.

GRYLLUS CITRIFOLIUS.



CHARACTER GENERICUS.

Caput inflexum, maxillosum, palpis instructum.

Antennæ setaceæ s. filiformes.

Alæ quatuor, deflexæ, convolutæ : inferiores plicatæ.

Pedes postici saltatorii : *Ungues* ubique bini.

Lin. Syst. Nat. p. 692.

CHARACTER SPECIFICUS, &c.

GRYLLUS thorace tetragono angulis scabro.

Lin. Syst. Nat. p. 695.

LOCUSTA VIRIDIS.

Degeer. inf. 3. p. 437. n. 7. t. 37. f. 3.

LOCUSTA CITRIFOLIA. L: thorace tetragono angulis crenatis.

Fabr. sp. inf. 2. p. 356.

Gryllorum omnium quotquot continet genus elytris quasi foliatis distinctos, maxima fortasse est hæc species, folioque fimillima. Varias Indiæ Orientalis partes incolit.



S

London Published April 1st 1798. by F. & R. Nodder of N. 13 Brainer Street.

THE CITRON-LEAVED LOCUST.



GENERIC CHARACTER.

Head inflected, armed with jaws, and furnished with palpi or feelers.

Antennæ either setaceous or filiform.

Wings four, deflex, convolute: the inferior ones plaited.

Feet hinder formed for leaping: *Claws* on all the feet double.

SPECIFIC CHARACTER.

LOCUST with the thorax of a somewhat quadrangular form and crenated on the edges, with very large green leaf-like exterior wings.

Of all that tribe of the genus *Gryllus* distinguished by the leaf-like appearance of the elytra or exterior wings, this seems to be the largest species. It also yields to none in the perfect and striking resemblance to leaves which its wings exhibit. It is a native of various parts of India.

THE
CITRON-LEAVED LOCUST

.....

General Characters

Tree 20-30 feet high, with jointed, and sometimes
very pithy branches.
Leaves alternate, ovate, entire, smooth, and shining,
longer than broad, the petioles long and slender.
Flowers small, yellow, and fragrant: they are on all the
branches.

Particular Characters

Leaves alternate, ovate, entire, smooth, and shining,
longer than broad, the petioles long and slender.
Flowers small, yellow, and fragrant: they are on all the
branches.

Of all the trees which are common in the
lowlands of the West Indies, this is the most
valuable. It is also the most common. It is also
the most useful. It is also the most beautiful.
It is also the most common. It is also the most
valuable. It is also the most beautiful.

PARUS CÆRULEUS.



CHARACTER GENERICUS.

Rostrum integerrimum, basi fetis tectum.

Lingua truncata, fetis terminata.

Lin. Syst. Nat. p. 340.

CHARACTER SPECIFICUS, &c.

PARUS virescens, subtus luteus, remigibus cærulefcentibus, fronte alba, vertice cæruleo.

PARUS remigibus cærulefcentibus: primoribus margine exteriori albis, fronte alba, vertice cæruleo.

Lin. Syst. Nat. p. 341.

PARUS CÆRULEUS.

Gesn. av. 641.

Will. orn. 175.

Raj. av. 74.

Licet inter pulcherrimas avium Britannicarum merito numerari possit Parus cæruleus, detrahit tamen a pretio quotidianus conspectus. Fatendum etiam est inesse illi indolem minus aptam ad conciliandum favorem; non tantum enim gemmas arborum frugiferarum devastat,

N

sed

fed et audax est ultra molem. Univerfo fane generi ingenium est minime mite et amabile; ferunter enim aliis avibus vim inferre et occidere cerebrum evellendo, quod folent comedere. Hoc licet frequenter fieri vix aufim dicere, a fedulis tamen hiftoriæ naturalis indagatoribus affirmatur. Paris omnibus mira est in nidificando folertia, foecunditasque ultra fidem. Iste de quo jam loquimur nidum ftruit elegantem in cavis arborum, vel fub murorum fummitatibus, interdum etiam in tuguriis et ftabulis. Ova duodecim, quindecim, et etiam octodecim deponit; parturit tamen, ut plurimum, non nifi femel in anno.



THE BLUE TITMOUSE.



GENERIC CHARACTER.

Bill strait, a little compressed, strong, hard, and sharp-pointed.

Nostrils round, and covered with reflex bristles.

Tongue as if cut off at the end, and terminated by three or four bristles.

Toes divided to their origin; back toe large and strong.

SPECIFIC CHARACTER, &c.

GREENISH-BACKED TITMOUSE, yellow beneath; with bluish remiges, white forehead, and azure crown.

THE BLUE TITMOUSE.

Will. orn. p. 242. pl. 43.

Br. Zool. 1. No. 163. pl. 57. fig. 2.

LA MESANGE BLEUE.

Pl. enl. 3. fig. 2.

Amongst the most beautiful of the British birds may be numbered the *Parus cæruleus* or common blue Titmouse, which, from its frequent appearance, is less regarded

garded than so elegant a visitant would otherwise be. It has however some qualities which are not calculated to obtain it universal approbation; since it is not only destructive to the young buds of fruit-trees, but has also a certain audacity in its disposition which would hardly be expected from so small a bird: indeed the manners of the Parí in general are observed to be not the most amiable, and they are accused of sometimes attacking other birds, and killing them by picking out their brains. Whether this can be considered as a frequent occurrence I cannot take upon me to determine, but it is recorded by some of the most accurate observers of Nature. The birds of this genus eminently excel in nidification, and are prolific almost beyond belief. The present species builds its curious nest in holes of trees; under the eaves of walls, and sometimes in out-houses. It lays about twelve, fifteen, and even sometimes eighteen eggs, but seldom breeds more than once in a year.

PENNATULA RENIFORMIS.



CHARACTER GENERICUS.

Corpus in aliis pinnatum, in aliis integrum.

Stipes nudus officulo interno.

CHARACTER SPECIFICUS, &c.

PENNATULA RENIFORMIS, altero latere polypifera, stipite lumbriciformi.

Pall. el. zooph. p. 374. n. 222.

PENNATULA RENIFORMIS, stirpe lumbrici facie, altero latere polypifera.

Soland. et Ellis zooph. p. 65. n. 8.

ALCYONIUM AGARICUM.

Gmel. Syst. Nat. p. 3811.

Formosissimæ huic Pennatulæ diversa est facies a plerisque congeneribus. E stipite qui brevis vermique similis, exoritur corpus expansum, reniforme, supra foraminibus tubulatum, unde ad libitum extenduntur tentacula, seu membra hydras referentia. Color in parte superiori viget lætissime purpureus; in inferiori pallidior est, et interdum fere flavescent. In insulis Americæ variis innascitur pennatula reniformis, nec raro circa littora conspicitur.





THE KIDNEY-SHAPED PENNATULA.



GENERIC CHARACTER.

Body in some species pinnated, in some entire; with polypes proceeding from its upper surface, and having a naked stem, furnished with an internal bone.

SPECIFIC CHARACTER, &c.

KIDNEY - SHAPED PENNATULA with worm-like stem.

THE KIDNEY-SHAPED PURPLE SEA-PEN.

Phil. T Vol. 53. t. 19. fig. 6—10.
Soland. *zöoph.* p. 65.

This most beautiful Pennatula to be ranked amongst those species which recede in point of habit from the major part of the genus. It consists of an expanded, kidney-shaped, flattened body, rising from a short worm-like stem, and covered on the upper surface with numerous tubular orifices, through which are exerted at pleasure the tentacula or polype-formed limbs

limbs of the animal. The colour of the upper surface is a beautiful purple; of the lower less brilliant, and sometimes yellowish. It is a native of the West-Indian Islands, where it is not uncommon.

ZEUS IMPERIALIS.



CHARACTER GENERICUS.

Caput compressum, declive: *Labium superius* membrana transversa fornicatum. *Lingua* subulata.

Membrana branchiostega radiis septem perpendicularibus: infimo transverso.

Corpus compressum.

Lin. Syst. Nat. p. 454.

CHARACTER SPECIFICUS, &c.

ZEUS cauda sublunari, corpore nunc rubente, nunc viridi, nunc purpureo, albo-guttato.

ZEUS LUNA?

Gmel. Syst. Nat. p. 1225.

POISSON DE LUNE?

Du Hamel des pêches, 3. p. 74. t. 15.

ZEUS cauda bifurca, colore argenteo purpureo splendens.

Strom. Sondmor. 323, 325. t. 1. f. 20.

Specierum omnium, quas paucas continet genus, maximam longe et splendidissimam depinximus, reliquos sane pisces Europæos vividis coloribus vincentem; quibus nitet adeo cum recens capta fit, ut insignes ful-

O

gores

gores imitando assequi incassum conetur ars pictoria. Variat præterea color primarius, qui vel ruber vel viridis aureo splendore quasi vernice obducitur. Totum corpus, excepto ventre, maculis plurimis ovatis argenteo-albis guttatum est. Pinnæ, ut plurimum, coccineæ. Cauda latissima admodum lunata. Repertus est Zeus imperialis in Europæis multis littoribus, rarius in Britannicis. Crescere solet in magnam molem, nec defuit specimen quod tres pedes longitudine, pondere centum fere libras æquaret. Notandum vero est alios plerosque pisces quos complectitur genus, modicos esse si non parvos, nitide argenteos, insignes latis corporibus, forma tenui et compressa, radiosque nonnullos pinnarum quæ in dorso caudaque, longius ultra reliquos excurrere.



THE
O P A H,
OR
IMPERIAL ZEUS.



GENERIC CHARACTER.

Head compressed, sloping down: *Upper lip* arched by a transverse membrane. *Tongue* subulate. *Branchiostegous membrane* with seven perpendicular rays; the lower transverse. *Body* compressed.

SPECIFIC CHARACTER, &c.

ZEUS with somewhat lunated tail: the body generally either red, green, or purple, with oval white spots.

OPAH OR KING-FISH.

Phil. Transf. abr. XI. p. 879. t. 5.

Brit. Zool. III. p. 195 t. 42. f. 2.

Of all the species of this genus, which is not a numerous one, the fish here delineated is by far the largest as well as the most splendid in its colour: it may indeed

indeed be considered as the most superb of all the European fish, and when recently taken exhibits an appearance so singularly vivid as to surpass all the attempts of art to give an adequate idea of its beauty. It also varies in this respect; the predominating colour being either red or green, with a rich lustre of gold, and appearing as if varnished. The whole body, except on the belly, is sprinkled with numerous oval spots of a silvery white. The fins are commonly scarlet. The tail is very broad and strongly lunated. This most elegant fish is sometimes found on the British coast, but is more frequent on those of other parts of Europe. It grows to a very large size, having been seen of the length of three feet, and of the weight of an hundred pounds. It may not be improper to observe that most of the other fishes of the genus, except the Doree, are small species, remarkable for their shining silvery colour, the great breadth of their bodies, their thin or compressed form, and the length of some of the rays of their dorsal and caudal fins, which frequently run out far beyond the rest.

VULTUR PERCNOPTERUS.



CHARACTER GENERICUS.

Rostrum rectum, apice aduncum.

Caput impenne, antice nuda cute.

Lingua bifida.

Lin. Syst. Nat. p. 121.

CHARACTER SPECIFICUS, &c.

VULTUR remigibus nigris margine exteriori
(præter extimas) canis.

Lin. Syst. Nat. p. 123.

VULTUR (percnopterus) capite nudo, gula plu-
mosa.

Hasselq. it. 209.

FALCO MONTANUS ÆGYPTIACUS.

Hasselq. act. stockh. 1751. p. 196.

VULTUR SACER ÆGYPTIUS.

Aldr. av. 1. p. 378. t. 379.

De avidissima horum alitum voracitate copiosius dis-
ferere longum esset et supervacaneum. Norunt om-
nes inexplebilem fere esse iis cupiditatem edendi. Non

P

tamen

tamen inopportunum sit notare paucos præter Condoræ seu vulturem maximum Americanum, animalia viva mortuis antepone, sed cadavera diligenter quærere quæ mira narium sagacitate e longinquo sentiunt. In orientalibus regionibus variæ vulturum species exercituum motus comitantur, juxtaque fatales campos gregatim circumvolant, dapem e strage orituram avide expectantes. Longam tamen passæ esuriem, præter solitum voraces quicquid cibi fors obtulerit subito et audacter arripiunt. Narrat Dominus Bruce peregrinator celeberrimus, dum iter Abissinum perageret, et in monte qui Lanalmon dicitur, cum sociis jam jam pransurus esset, vulturem immanem e proximis rupibus magna vi in patinam infiliisse, et cum coxa armoque caprinis simul arreptis avolasse: mox reducem et plus prædæ meditantem scloppeto ab ipso interfectum fuisse. Aquilam vocat hunc alitem Dominus Bruce, sed a figura et descriptione satis patet vulturem fuisse, barbatum scilicet Linnæi, mole et gula jamdudum insignem. Non possum non suspicari Stymphalidas veterum majoribus vulturini generis speciebus originem debere. Vultur Percnopterus non tantum in calidioribus regionibus invenitur, sed et in Europa temperata. Figura hæc nostra ab ipsa ave fideliter delineata est.



THE
ALPINE VULTURE.



GENERIC CHARACTER.

Bill straight, hooked at the tip.

Head commonly bare of feathers, with a naked
skin in front.

Tongue bifid.

SPECIFIC CHARACTER, &c.

VULTURE with black remiges, hoary on the
outer edge (except the exterior ones.)

THE VULTURINE EAGLE OF ALDROVAND.

Will. orn. p. 64. t. 4.

LE VAUTOUR DES ALPES.

Bris. orn. i. p. 464. t. 4.

LE PERCNOPTERE.

Buff. ois. 1. p. 149.

Pl. enl. 426.

The voracity and predacious disposition of the birds
of this tribe are too well known to require particular
description. It may be observed, however, that most
of the species prefer the flesh of dead animals to other

prey; few, except the Condor, or great South American vulture, attacking any living animals in preference, but diligently seeking for the remains of carrion, which they are enabled to perceive from a wonderful distance by their exquisite power of scent. In the Eastern climates vultures of various species never fail to attend the field of battle, eagerly hovering in multitudes at some distance, in expectation of their wished-for banquet. When pressed by hunger, they become unusually rapacious, and seize with indiscriminating haste whatever food is accessible. Thus we are assured by the celebrated Mr. Bruce, that during his Abyssinian expedition, while himself and his companions were seated on the top of the mountain Lanalmon, preparing their repast, a large vulture came from the neighbouring cliffs, and seized out of the vessel in which their meat lay, a leg and shoulder of goats flesh in its talons, and flew away with them both; and soon returning for a second booty, was shot by Mr. Bruce. From the description and figure given by that gentleman, it appears probable, that though called an Eagle, it was a species of vulture; viz. the *vultur barbatus* of Linnæus, which is one of the largest of the genus, and is a bird of great strength and vigour. It is no improbable supposition that the attacks of such birds may have afforded some foundation for the ancient fictions of the Stymphalides. The *vultur percnopterus* is found not only in the hotter regions of the world, but even in the temperate parts of Europe. The figure here represented was taken with great accuracy from the bird itself.

LACERTA BASILISCUS.



CHARACTER GENERICUS.

Corpus tetrapodum caudatum, nudum.

Lin. Syst. Nat. p. 359.

CHARACTER SPECIFICUS, &c.

LACERTA cauda tereti longa, pinna dorsali radiata, occipite cristato.

Lin. Syst. Nat. p. 366.

Laur. amph. p. 50. n. 75.

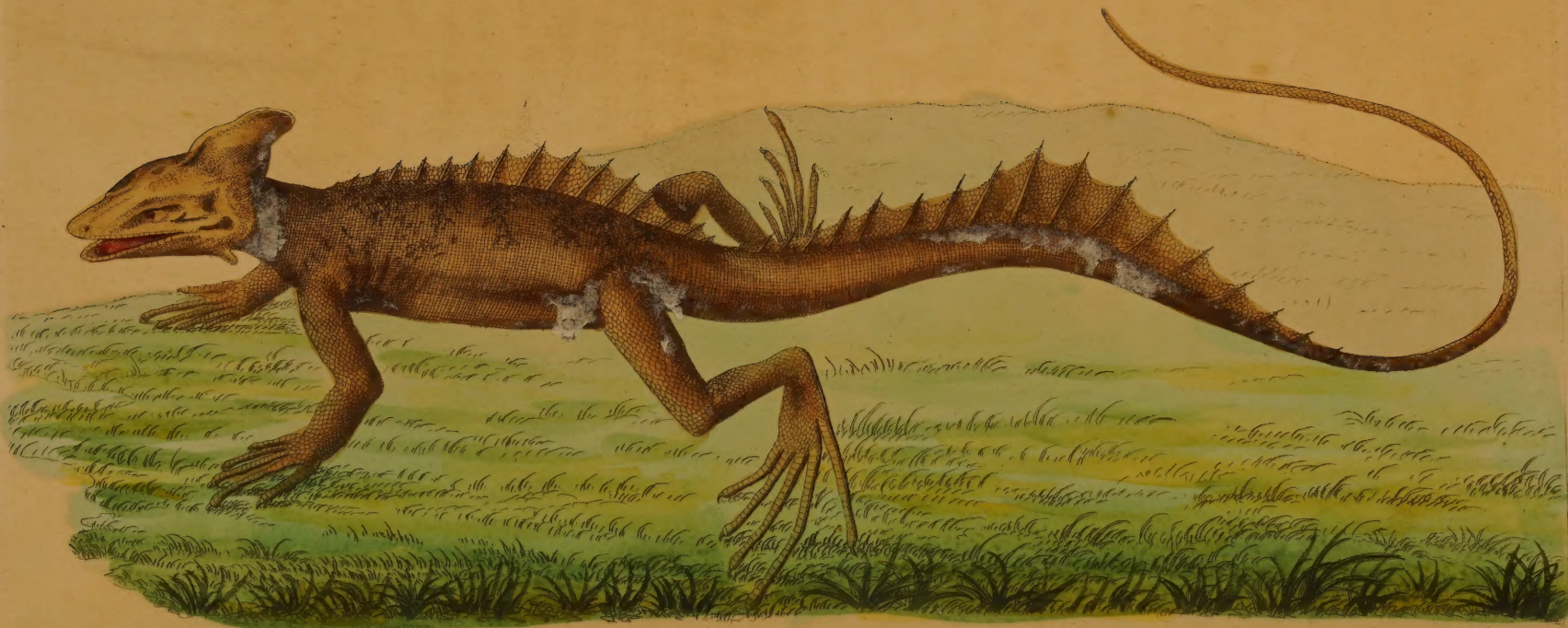
Seb. mus. 1. t. 100. f. 1.

Basiliscus, quem memorant antiqui animalium venosissimum, vivit non nisi in bellis pictorum et poetarum fabulis. Omisiss aliis, Lucanum satis sit citare, qui licentia fusus vere poetica describit eum ardenti in Africa horrendum sibilantem, et torvo lumine ipsum etiam serpentinum genus procul a seipso deterrentem.

“ Sibilaque effundens cunctas terrentia pestes,
Ante venena nocens, late sibi submovet omne
Vulgus, et in vacua regnat Basiliscus arena.”

Basiliscus autem, quem eo nomine norunt nunc temporis physici, est lacertæ species forma admodum singulari,

lari, quæque eminenter distinguitur cute velut in alæ formam expansa, per totum dorsum et maximam caudæ partem continuata, intusque radiata, qualiter fere sunt piscium pinnæ, seu ut rectius loquar, alæ *draconis* five *lacertæ volantis*; quæque inæqualiter affurgit in variis partibus, adeo ut sinuosa et denticulata videatur, et ad arbitrium vel erigitur et dilatatur, aut deprimitur et contrahitur. Occiput intus cavum quasi in cucullum seu potius in cristam extenditur. Visu licet terribilis sit Basiliscus, ingenio tamen est prorsus innocuo. Aliarum plurimarum lacertarum more, inter arbores versatur, insectis aliisque ejusmodi victitans. Americam Australem incolit. Jamdudum in Sebæ thesauro depictus est eleganter admodum et fideliter; effecit autem forma nova et incognita (rarissima enim est species) ut a multis pro monstro imaginario haberetur. Extat tamen in Museo Britannico specimen perfectissimum, spiritu vini conditum, quod Sebanæ figuræ veritatem abunde comprobat. Probabile porro est, immo pene certum, Linnæum, qui, testante filio, ipsum animal nunquam viderat, ab hac Sebæ figura descriptionem suam specificam condidisse. Color Basilisci pallet fusco-cinereus, corpore superiore notis seu umbris aliquot obscurioribus variato. Longitudo ei est quasi sesquipedalis. Notandum est, juniorem cutis istius quæ porrigitur super dorsum caudamque nec non cristæ quæ in occipitio affurgit, levia tantum vestigia ostendere.



THE BASILISK.



GENERIC CHARACTER.

Body four-footed, tailed, naked.

SPECIFIC CHARACTER, &c.

LONG-TAILED LIZARD, with radiated dorsal and caudal fin, and pointed occipital crest.

THE BASILISK.

The Basilisk of the ancients, supposed to be the most malignant of all poisonous animals, and of which the very aspect was said to be fatal, is a fabulous existence, to be found only in the representations of painters and poets. Without citing other descriptions, it may be sufficient to quote that of Lucan, who, with true poetic licence, represents the Basilisk exerting his terrific glance in the burning deserts of Africa, and obliging the rest of the poisonous tribe to preserve an humble distance.

“Sibilaque effundens cunctas terrentia pestes,
Ante venena nocens, late sibi submovet omne
Vulgus, et in vacua regnat Basiliscus arena.”

But

But fiercely hissing, thro' the poison'd air
The Basilisk exerts his deathful glare:
At distance bids each vulgar pest remain,
And reigns sole monarch of his sultry plain.

But the animal known in modern natural history by this name is a species of lizard, of a very singular shape, and which is particularly distinguished by a long and broad wing-like process or expansion continued along the whole length of the back, and to a very considerable distance on the upper part of the tail, and furnished at certain distances with internal radii analogous to those in the fins of fishes, or still more so to those in the wings of the draco volans or flying lizard. This process is of different elevation in different parts, so as to appear strongly sinuated and indented, and is capable of being either dilated or contracted at the pleasure of the animal. The occiput or hind part of the head is elevated into a very conspicuous pointed hood or hollow crest. Notwithstanding its formidable appearance the Basilisk is a perfectly harmless animal, and like many other of the lizard tribe, resides principally amongst trees, where it feeds on insects, &c. It is a native of South America. It has long ago been admirably figured by Seba, and as it is an extremely rare species, has sometimes been considered, (from the strangeness of its form) as a fictitious representation. There is however in the British Museum a very fine specimen, well preserved in spirits, and which fully confirms the excellency of Seba's figure; from which, in all probability, Linnæus himself, (who never saw the animal,) took his specific description.

The

The colour of the Basilisk is a pale cinereous brown, with some darker variegations towards the upper part of the body. Its length is about a foot and half. The young or small specimens have but a slight appearance either of the dorsal or caudal process, or of the pointed occipital crest.

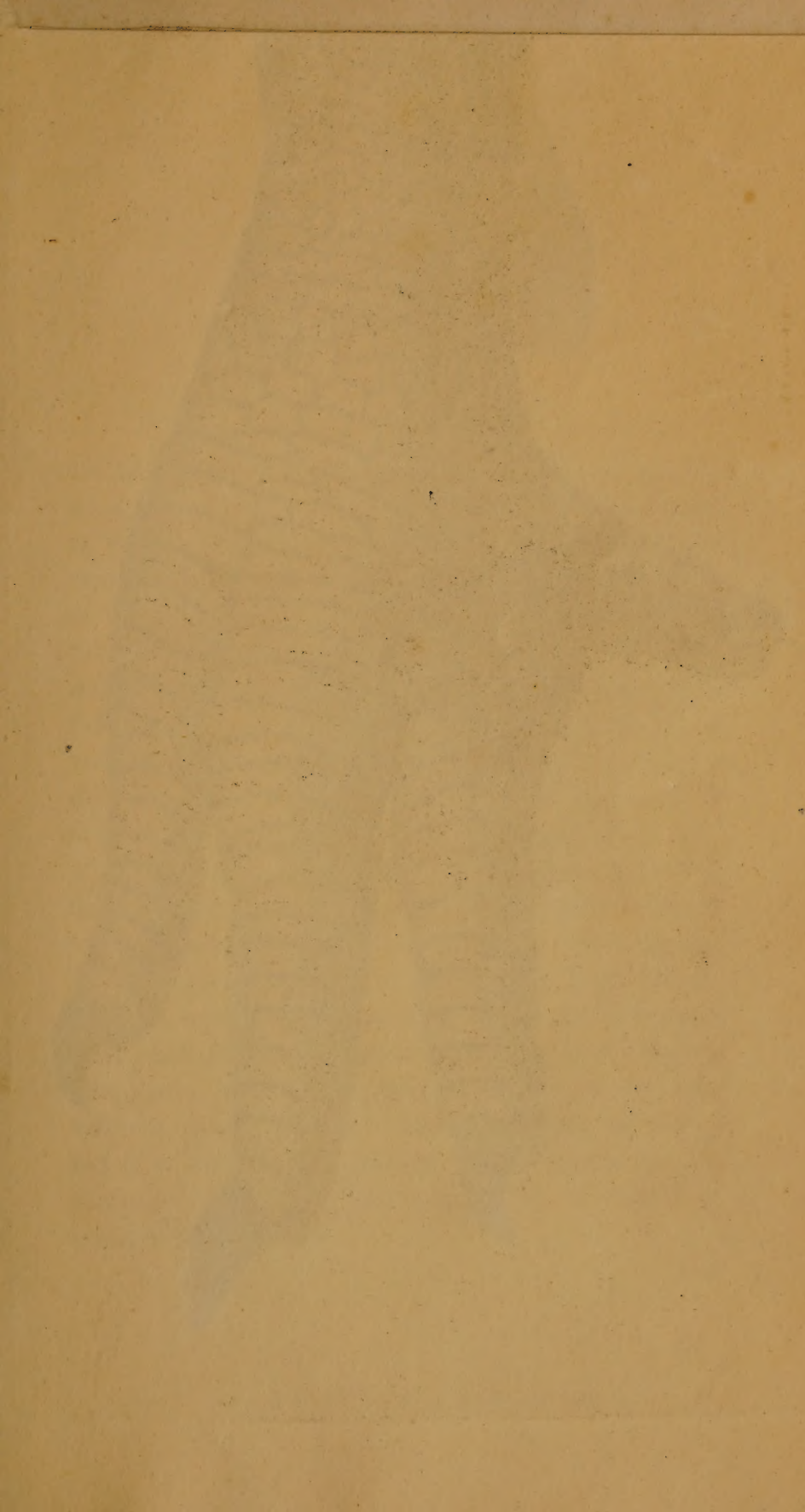
P E S D I D I.



EX PEDE HERCULEM!

Didum ineptum Linnæi, miram scilicet et anomalam avem, in priore numero hujus operis fideliter ad exemplar archetypum depictam descripsi. At de vera avis existentia a multis semper dubitatum est, eoque magis quod adhuc credi solitum est nulla ejus in museis Europæis reperiri posse vestigia. Dum autem in miscellaneam farraginem et quisquilias Musei Britannici nuperrime obiter inspieiebam, comite ingenioso pictore domino Reinagle juniore, fauste admodum se oculis obtulit pes adeo insolitus ut primo visu Didi pedem nobis illico in mentem revocaverit. Examinato dehinc ulterius specimine, verum esse et genuinum Didi pedem fatis constabat. Dubium autem omne sustulit Grewii descriptio in opere quod dicitur “ Museum Regalis “ Societatis,” cui eum plene et ad amussim respondere sensi. Figuræ igitur, quæ juxta naturam depingitur, adjunxi etiam descriptionem quæ apud Grewium legitur, occasionem avide arripiens rem rarissimam diuque desideratam lectoribus proponendi.

“ Qui ibi affervatur pes squamis flavo rubescentibus
“ contegitur, et longitudine paululum superat quantuor uncias, latitudine quinque, saltem circa articulos; et licet minor sit pede struthionis et casuarii,
“ forsan tamen fere æquali sit robore, si ratio habeatur
“ brevitatis.”





THE LEG OF A DODO.



In a preceding number of the present work I have given a description, accompanied by a figure accurately copied from an original picture said to have been taken from nature, of that most singular bird called the Dodo: an animal so very rare, and of an appearance so uncouth, as to have given rise to some doubts as to its real existence; which was also rendered still more suspicious from the supposed want of any remains of the bird itself in the museums of Europe. A very short time since however, on cursorily examining several miscellaneous articles in one of the apartments of the British Museum, in company with that very ingenious artist Mr. Reinagle jun^r, we had the good fortune to discover a leg, which even at first view appeared of so peculiar an aspect that it instantly suggested the idea of the bird in question. On farther examination it was still less to be doubted that it must really have belonged to that curious bird; and on collating it with the description given by Grew in his *Museum Regalis Societatis*, it agreed in all points with the measurements there particularized. I therefore accompany the figure, here given, which is represented of the natural size, with the description from the above work of Grew, and it is with peculiar pleasure that I embrace the opportunity of presenting my readers with so interesting a curiosity.

“ The

“ The leg here preserved is covered with a reddish
“ yellow scale. Not much above four inches long ;
“ yet above five in thickness, or round about the
“ joints : wherein though it be inferior to that of an
“ Ostrich or Caffoary, yet joined with its shortness,
“ may render it of almost equal strength.”

TESTUDO MELEAGRIS.



CHARACTER GENERICUS.

Corpus tetrapodum, caudatum, testa obtectum.

Os mandibulis nudis, edentulis.

Lin. Syst. Nat. p. 350.

CHARACTER SPECIFICUS.

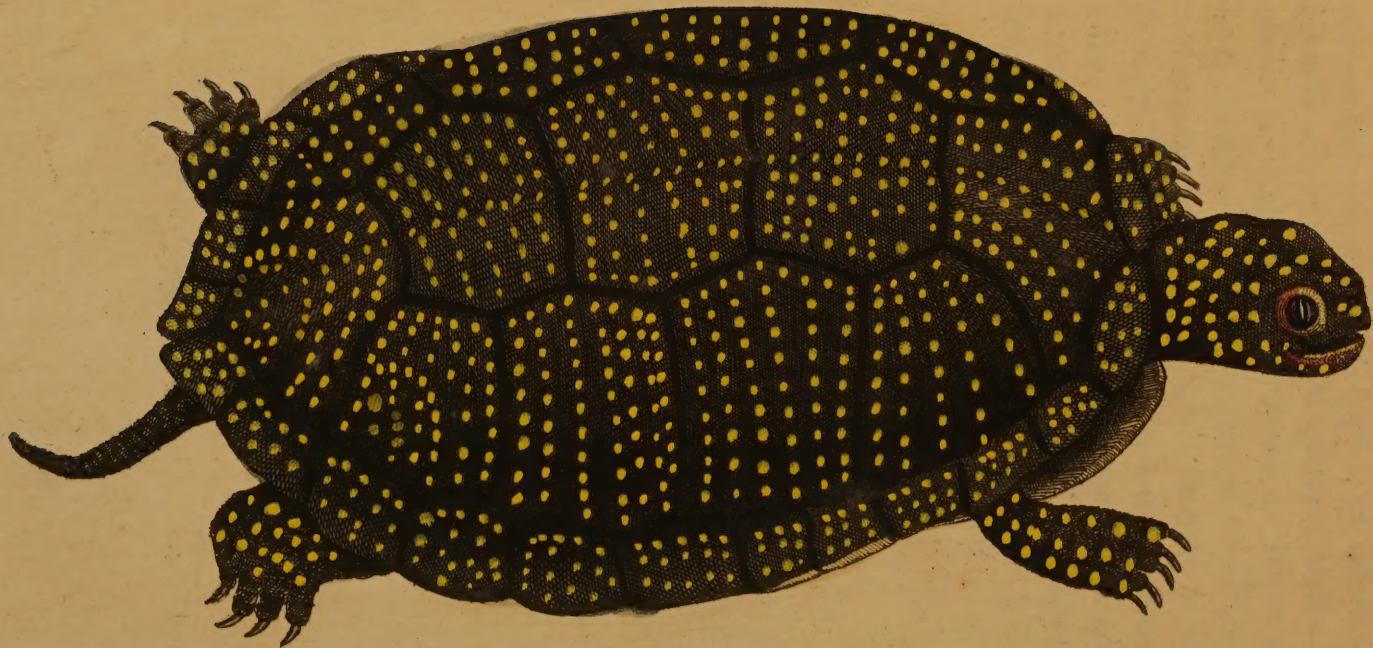
TESTUDO pedibus subpalmatis? testa ovata glabra maculis innumeris flavis guttata.

Plurimas testudinum species sibi invicem nimis affines accurate dignoscere difficillimum est. De aliis ne dubitari quidem possit, quippe quæ notas gerant conspicuas et insignes ad distinctionem: qualis scilicet est testudo geometrica, quam striarum flavarum super scutum bella et ordinata serie vel tiro statim agnoverit. Illam etiam quam describere pergimus a reliquo genere fatis sejungit notabilis characterum et colorum dispositio. Longa est, ut plurimum, quinque vel sex uncias. Color fusco-castaneus saturatior per totum corpus superius guttulis ovatis albido-flavescentibus pulcherrime aspergitur, in singula tegminis divisione quasi ducenis. Scutum læve est, carens sulcis et prominentiis, nisi quod per medium trium præcipuarum divisionum excurrat carina paululum levata, quæ tamen in nonnullis speci-

Q

minibus

minibus obscurius cernitur. Lævis etiam est margo scuti, seu ex partibus constans una serie continuatis, non inæqualiter ferratis, sed figuram prope ellipticam toto ambitu efficientibus. Superficies inferior flavescit maculis aliquot fuscis et inæqualibus notata. Caput modicum. Oculi magni. Pedes iis similes quos habent reliquæ testudines terrestres et fluviatiles, unguibus muniuntur validis. Cauda longula et squamosa. Si super fundum nigriorem confluerint inter se maculæ, quod rarius evenit, perit magna ex parte pulchritudo testudinis meleagridis. In America præcipue innascitur.



London, Published July 10. 1793. by F. P. Nodder & Co. N. 25 Brewer Street.

THE SPECKLED TORTOISE.



GENERIC CHARACTER.

Body four-footed, tailed, covered with a shell.

Mouth consisting of naked toothless mandibles.

SPECIFIC CHARACTER, &c.

TORTOISE with subpalmated? feet, and ovate smooth shell speckled with innumerable yellow dots.

LA JAUNE.

Cepede Hist. Nat. des quadr. ovip. 1.
p. 135. t. 6.

So great is the similarity between several of the tortoise tribe, that it is by no means easy to distinguish with accuracy the particular species. Some however are so strongly characterized as to be at all times readily ascertained. Thus the *Testudo geometrica* or striped Tortoise is so strikingly distinguished by the beautiful and regular disposition of the yellow marks on its shield, as to be instantly recognised by any one in the least conversant with this genus. The species here represented is also, in general, so remarkable in its appearance as

to be immediately known from any other kind. Its usual length is about five or six inches: its colour a deep chefnut-brown, most elegantly marked over the whole upper surface with innumerable oval specks of yellowish white. There are scarce less than 150 or 200 of these specks on each division of the shield. The whole is smooth, or undistinguished by any furrows or risings on the divisions, except that down the middle of the three chief or central pieces runs an elevated or projecting carina as it were, which is much less distinct in some specimens than in others. The edge or outline of the shell is smooth, or composed of pieces which do not project unequally, but form one continued, nearly elliptic figure. The lower surface is pale yellowish, with a few irregular patches of brown. The head is moderately large. The eyes large. The feet of the usual structure in other land and fresh-water tortoises, and furnished with strong claws. The tail longish and scaly. It sometimes happens that the beautiful appearance which generally distinguishes this species, is nearly lost, or at least greatly obliterated, by the dark ground-colour predominating too much, and the spots becoming confluent. This however is not often the case. It is a native of America.

DORIS ARGO.



CHARACTER GENERICUS.

Corpus repens, oblongum, subtus planum.

Os antice subtus.

Anus postice, supra cinctus ciliis.

Tentacula duo, supra corpus antice, intra foramina retractilia.

CHARACTER SPECIFICUS, &c.

DORIS OVALIS, corpore lævi, tentaculis duobus ad os, ano ciliato phrygio.

Lin. Syst. Nat. p. 1083.

ARGO.

Bohadsch. mar. 65. t. 5. f. 45.

LEPUS MARINUS alter major.

Column. ecphr. t. 32.

Plurima quæ hoc genus amplectitur animalia limacibus valde affinia omnino in mari degunt. Ostendit tabula specierum Europæarum maximam et formosissimam. Color variat: interdum scilicet flavus est, plus minusve saturatus; interdum aurantius, seu etiam coccineus. In multis Britannicæ littoribus non raro conspicitur *Doris Argo*.

THE LEMON DORIS.



GENERIC CHARACTER.

Body repent, oblong, flat beneath.

Mouth placed below toward the anterior end.

Vent behind furrow above by a fringe.

Tentacula two, Teated on the upper part of the body in front, retractile.

SPECIFIC CHARACTER, &c.

OVAL DORIS with smooth body; the vent furrounded by a ramified fringe.

LEMON DORIS.

Pennant Brit. Zool. 4. p. 36.

THE SEA-LEMON.

The animals of this genus are greatly allied to those of the genus *Limax*, but are entirely marine. The species of *Doris* are numerous. The largest as well as the most elegant of the European kinds is that figured on the annexed plate. In colour it varies much; being sometimes of a yellow, more or less deep, and sometimes of a bright orange, or even scarlet. It is not unfrequently found on several parts of the coasts of Britain.



SPONGIA INFUNDIBULUM.



CHARACTER GENERICUS.

Animal? fixum, flexile, polymorphum, torpidissimum, contextum vel e fibris reticulatis, vel e spinulis gelatina viva vestitis;

Osculis seu foraminibus superficiei aquam respirantibus.

Soland. et Ellis zooph. p. 182.

CHARACTER SPECIFICUS, &c.

SPONGIA infundibuliformis turbinata flexilis.

Lin. Syst. Nat. p. 1296:

SPONGIA forma infundibuli.

C. Bauh. pin. p. 369.

J. Bauh. hist. pl. 3. p. 816.

SPONGIA foliata aspera et Spongia infundibuliformis.

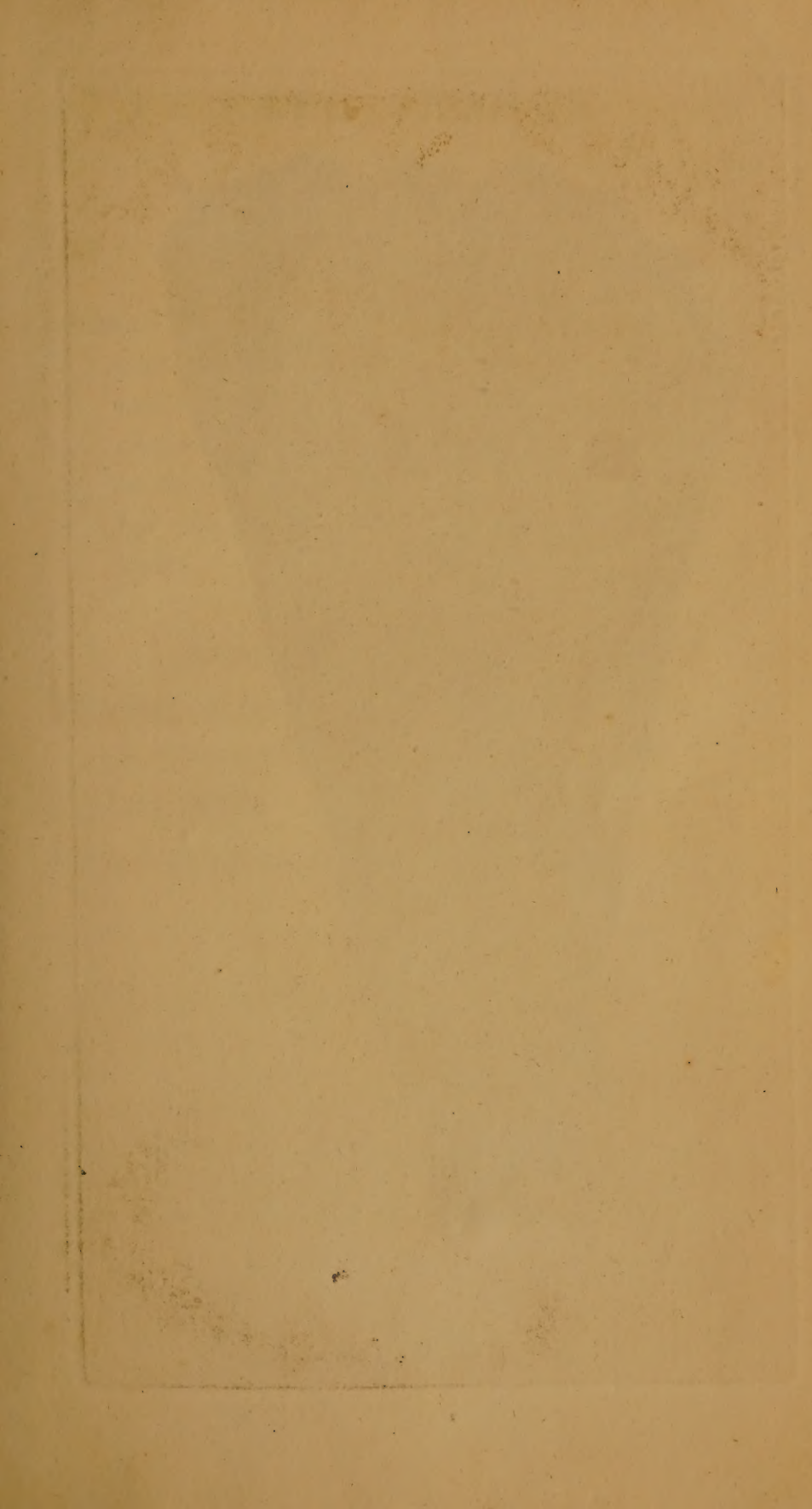
Petiv. peregr. t. 9. f. 4. 6.

SPONGIA (crateriformis) infundibuliformis molliuscula, membranaceo-cellulosa, extus villosa crassior.

Pall. el. zooph. p. 386. n. 233.

De spongiarum natura, mira certe et ambigua, diu patuit philosophis amplius disputandi campus. Crediderunt

derunt nonnulli fatis inepte, quæque opinio nunc penitus abolevit, esse eas vermium quorundam opus qui in cavitatibus pererrantes reperiuntur. Alii mera esse vegetabilia putarunt. Inesse autem iis vim vitæ ex hoc fatis constat, quod in aquis natalibus attrectatæ a tactu paululum refugiant, quodque quiescentes poros alternatim contrahant et dilatent. Ut verbo dicam, constant spongiæ e ramosissima tuborum capillaceorum copia, facultatem quandam contractionis habentium: horum ope nutrimentum ex aquis in quibus crescunt absorbentes. Iis igitur utpote *zoophytorum* omnium inertissimis seponendus est locus proprius et ab aliis separatus. Facie inter se plurimum differunt. Aliæ scilicet *amorphæ*, seu figura carentes certa et constanti, ut spongia *officinalis* vel vulgaris. Aliæ cyathi instar formatæ. Aliæ tubulatæ; aliæ multiformes; aliæ denique ramosæ et etiam reticulatæ ad similitudinem quodammodo accedunt Gorgoniæ, seu Flabelli Veneris. Species, quam pro exemplo depinximus, maris Mediterranei et Indici rupibus, more reliqui generis, adhæret. Magnitudine variat. Habet nempe interdum diametros pedem, ad minimum, interdum paucas tantum uncias. Color ejus leviter fuscus, et substantia minus tenax quam spongiæ vulgaris, quæ et *officinalis* dicitur.





FUNNEL SPONGE.



GENERIC CHARACTER.

Animal? fixed, flexible, torpid, of various forms; composed either of reticulated fibres, or masses of small spines interwoven together; clothed with a living? gelatinous flesh full of small mouths or foramina on its surface, by which it sucks in and throws out the water.

SPECIFIC CHARACTER, &c.

FUNNEL-SHAPED FLEXILE SPONGE with surface more or less irregular or roughened.

CUP SPONGE.

FUNNEL SPONGE.

Sponges have afforded a field of controversy for philosophical observers, and may be numbered amongst the most obscure or doubtful productions of nature. By some they have been supposed the fabric of certain worms allied to Terebellæ, which are often found straying about in their cavities: an idea not very probable, and which is now sufficiently exploded. Others

R

have

have imagined them to be mere vegetables; but that they are really possessed of a living principle is evident from the circumstance of their alternately contracting and dilating their pores, and shrinking in some degree from the touch when examined in their native waters. In short, sponges consist of an infinitely ramified mass of capillary tubes, possessed of a certain degree of contractile power, and capable from their structure, of absorbing nutriment from the surrounding fluid in which they are by nature immersed. They therefore form an animal tribe different from all others, and may be considered as the most torpid of all Zoophytes. The different species of Sponge differ greatly in appearance from each other: some being amorphous, or of no regular shape, as the common or officinal sponge: others cyathiform or cup-shaped: others tubular, and of various forms; and some are ramified and reticulated in such a manner as to bear a considerable resemblance to the sea-fan or *Gorgonia Flabellum* of Linnæus. The species here exhibited, as an example of the genus, is found both in the Mediterranean and Indian seas; adhering, like others of its genus, to rocks. In size it varies from a few inches in diameter to that of a foot or more. Its colour is a pale brown, and its substance less strong or tenacious than that of the common or officinal species.

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